

Pro Lys Asn Ser Gln Asp Ser Asp Leu Lys Ile Lys Leu Ala Val Arg
 435 440 445
 Met Asp Lys Pro Ala His Met Lys His Ser Gly Tyr Leu Tyr Ala Leu
 450 455 460
 Gly Gln Lys Val Trp Lys Arg Trp Lys Lys Arg Tyr Phe Val Leu Val
 465 470 475 480
 Gln Val Ser Gln Tyr Thr Phe Ala Met Cys Ser Tyr Arg Glu Lys Lys
 485 490 495
 Ser Glu Pro Gln Glu Leu Met Gln Leu Glu Gly Tyr Thr Val Asp Tyr
 500 505 510
 Thr Asp Pro His Pro Gly Leu Gln Gly Gly Cys Met Phe Phe Asn Ala
 515 520 525
 Val Lys Glu Gly Asp Thr Val Ile Phe Ala Ser Asp Asp Glu Gln Asp
 530 535 540
 Arg Ile Leu Trp Val Gln Ala Met Tyr Arg Ala Thr Gly Gln Ser Tyr
 545 550 555 560
 Lys Pro Val Pro Ala Ile Gln Thr Gln Lys Leu Asn Pro Lys Gly Gly
 565 570 575
 Thr Leu His Ala Asp Ala Gln Leu Tyr Ala Asp Arg Phe Gln Lys His
 580 585 590
 Gly Met Asp Glu Phe Ile Ser Ala Asn Pro Cys Lys Leu Asp His Ala
 595 600 605
 Phe Leu Phe Arg Ile Leu Gln Arg Gln Thr Leu Asp His Arg Leu Asn
 610 615 620
 Asp Ser Tyr Ser Cys Leu Gly Trp Phe Ser Pro Gly Gln Val Phe Val
 625 630 635 640
 Leu Asp Glu Tyr Cys Ala Arg Tyr Gly Val Arg Gly Cys His Arg His
 645 650 655
 Leu Cys Tyr Leu Ala Glu Leu Met Glu His Ser Glu Asn Gly Ala Val
 660 665 670
 Ile Asp Pro Thr Leu Leu His Tyr Ser Phe Ala Phe Cys Ala Ser His
 675 680 685
 Val His Gly Asn Arg Pro Asp Gly Ile Gly Thr Val Ser Val Glu Glu
 690 695 700
 Lys Glu Arg Phe Glu Glu Ile Lys Glu Arg Leu Ser Ser Leu Leu Glu
 705 710 715 720

Asn Gln Ile Ser His Phe Arg Tyr Cys Phe Pro Phe Gly Arg Pro Glu			
725	730	735	
Gly Ala Leu Lys Ala Thr Leu Ser Leu Leu Glu Arg Val Leu Met Lys			
740	745	750	
Asp Ile Ala Thr Pro Ile Pro Ala Glu Glu Val Lys Lys Val Val Arg			
755	760	765	
Lys Cys Leu Glu Lys Ala Ala Leu Ile Asn Tyr Thr Arg Leu Thr Glu			
770	775	780	
Tyr Ala Lys Ile Glu Glu Thr Met Asn Gln Ala Ser Pro Ala Arg Lys			
785	790	795	800
Leu Glu Glu Ile Leu His Leu Ala Glu Leu Cys Ile Glu Val Leu Gln			
805	810	815	
Gln Asn Glu Glu His His Ala Glu Ala Phe Ala Trp Trp Pro Asp Leu			
820	825	830	
Leu Ala Glu His Ala Glu Lys Phe Trp Ala Leu Phe Thr Val Asp Met			
835	840	845	
Asp Thr Ala Leu Glu Ala Gln Pro Gln Asp Ser Trp Asp Ser Phe Pro			
850	855	860	
Leu Phe Gln Leu Leu Asn Asn Phe Leu Arg Asn Asp Thr Leu Leu Cys			
865	870	875	880
Asn Gly Lys Phe His Lys His Leu Gln Glu Ile Phe Val Pro Leu Val			
885	890	895	
Val Arg Tyr Val Asp Leu Met Glu Ser Ser Ile Ala Gln Ser Ile His			
900	905	910	
Arg Gly Phe Glu Gln Glu Thr Trp Gln Pro Val Asn Asn Gly Ser Ala			
915	920	925	
Thr Ser Glu Asp Leu Phe Trp Lys Leu Asp Ala Leu Gln Met Phe Val			
930	935	940	
Phe Asp Leu His Trp Pro Glu Gln Glu Phe Ala His His Leu Glu Gln			
945	950	955	960
Arg Leu Lys Leu Met Ala Ser Asp Met Leu Glu Ala Cys Val Lys Arg			
965	970	975	
Thr Arg Thr Ala Phe Glu Leu Lys Leu Gln Lys Ala Ser Lys Thr Thr			
980	985	990	
Asp Leu Arg Ile Pro Ala Ser Val Cys Thr Met Phe Asn Val Leu Val			
995	1000	1005	

10503

Asp Ala Lys Lys Gln Ser Thr Lys Leu Cys Ala Leu Asp Gly Gly Gln
 1010 1015 1020
 Glu Phe Gly Ser Gln Trp Gln Gln Tyr His Ser Lys Ile Asp Asp Leu
 1025 1030 1035 1040
 Ile Asp Asn Ser Val Lys Glu Ile Ile Leu Leu Leu Val Ser Lys Phe
 1045 1050 1055
 Val Ser Val Leu Glu Gly Val Leu Ser Lys Leu Ser Arg Tyr Asp Glu
 1060 1065 1070
 Gly Thr Phe Phe Ser Ser Ile Leu Ser Phe Thr Val Lys Ala Ala Val
 1075 1080 1085
 Lys Tyr Val Asp Val Pro Lys Pro Gly Met Asp Leu Ala Asp Thr Tyr
 1090 1095 1100
 Ile Met Phe Val Arg Gln Asn Gln Asp Ile Leu Arg Glu Lys Val Asn
 1105 1110 1115 1120
 Glu Glu Met Tyr Ile Glu Lys Leu Phe Asp Gln Trp Tyr Ser Ser Ser
 1125 1130 1135
 Met Lys Val Ile Cys Val Trp Leu Thr Asp Arg Leu Asp Leu Gln Leu
 1140 1145 1150
 His Ile Tyr Gln Leu Lys Thr Leu Ile Lys Ile Val Lys Lys Thr Tyr
 1155 1160 1165
 Arg Asp Phe Arg Leu Gln Gly Val Leu Glu Gly Thr Leu Asn Ser Lys
 1170 1175 1180
 Thr Tyr Asp Thr Val His Arg Arg Leu Thr Val Glu Glu Ala Thr Ala
 1185 1190 1195 1200
 Ser Val Ser Glu Gly Gly Gly Leu Gln Gly Ile Thr Met Lys Asp Ser
 1205 1210 1215
 Asp Glu Glu Glu Glu Gly
 1220

<210> 4359

<211> 141

<212> PRT

<213> Homo sapiens

<400> 4359

Met Asn Gln Leu Pro Ala Gly Pro Pro Val Pro Gly Ser Gly Ser Gly
 1 5 10 15
 Pro Leu Ala Ala Cys Pro Glu Leu Thr Ser Ala Thr Ser Pro Trp Leu
 20 25 30
 Gln Val Gly Thr Asn Ala Met Asp Ser Pro Leu Leu Lys Tyr Ser Ala
 35 40 45
 Lys Asp Tyr Phe Phe Lys Ala Ala Leu Cys His Phe Cys Ile Asp Met
 50 55 60
 Leu Asn Ala Lys Leu Ala Val Gln Lys Tyr Glu Glu Leu Phe Pro Ala
 65 70 75 80
 Phe Ser Asp Ser Arg Glu Cys Lys Leu Met Lys Lys Leu Leu Glu Ala
 85 90 95
 His Glu Glu Gln Asn Val Asp Ser Tyr Thr Glu Ser Val Lys Glu Tyr
 100 105 110
 Asp Ser Ile Ser Arg Leu Asp Gln Trp Leu Thr Thr Met Leu Leu Arg
 115 120 125
 Ile Lys Lys Thr Ile Gln Gly Asp Glu Glu Asp Leu Arg
 130 135 140

<210> 4360

<211> 545

<212> PRT

<213> Homo sapiens

<400> 4360

Met Glu Leu Ser Gln Lys Leu Tyr Lys Tyr Cys Pro Lys Glu Trp Lys
 1 5 10 15
 Lys Glu Ala Ser Lys Gly Ile Asp Gln Phe Gly Pro Pro Met Ile Ile
 20 25 30
 His Phe Arg Val Gln Tyr Tyr Val Glu Asn Gly Arg Leu Ile Ser Asp
 35 40 45
 Arg Ala Ala Arg Tyr Tyr Tyr Tyr Trp His Leu Arg Lys Gln Val Leu
 50 55 60
 His Ser Gln Cys Val Leu Arg Glu Glu Ala Tyr Phe Leu Leu Ala Ala
 65 70 75 80

Phe Ala Leu Gln Ala Asp Leu Val Asn Phe Lys Arg Asn Lys His Tyr
 85 90 95
 Gly Lys Tyr Phe Glu Pro Glu Ala Tyr Phe Pro Ser Trp Val Val Ser
 100 105 110
 Lys Arg Gly Lys Asp Tyr Ile Leu Lys His Ile Pro Asn Met His Lys
 115 120 125
 Asp Gln Phe Ala Leu Thr Ala Ser Glu Ala His Leu Lys Tyr Ile Lys
 130 135 140
 Glu Ala Val Arg Leu Asp Asp Val Ala Val His Tyr Tyr Arg Leu Tyr
 145 150 155 160
 Lys Asp Lys Arg Glu Ile Glu Ala Ser Leu Thr Leu Gly Leu Thr Met
 165 170 175
 Arg Gly Ile Gln Ile Phe Gln Asn Leu Asp Glu Glu Lys Gln Leu Leu
 180 185 190
 Tyr Asp Phe Pro Trp Thr Asn Val Gly Lys Leu Val Phe Val Gly Lys
 195 200 205
 Lys Phe Glu Ile Leu Pro Asp Gly Leu Pro Ser Ala Arg Lys Leu Ile
 210 215 220
 Tyr Tyr Thr Gly Cys Pro Met Arg Ser Arg His Leu Leu Gln Leu Leu
 225 230 235 240
 Ser Asn Ser His Arg Leu Tyr Met Asn Leu Gln Pro Val Leu Arg His
 245 250 255
 Ile Arg Lys Leu Glu Glu Asn Glu Glu Lys Lys Gln Tyr Arg Glu Ser
 260 265 270
 Tyr Ile Ser Asp Asn Leu Asp Leu Asp Met Asp Gln Leu Glu Lys Arg
 275 280 285
 Ser Arg Ala Ser Gly Ser Ser Ala Gly Ser Met Lys His Lys Arg Leu
 290 295 300
 Ser Arg His Ser Thr Ala Ser His Ser Ser Ser His Thr Ser Gly Ile
 305 310 315 320
 Glu Ala Asp Thr Lys Pro Arg Asp Thr Gly Pro Glu Asp Ser Tyr Ser
 325 330 335
 Ser Ser Ala Ile His Arg Lys Leu Lys Thr Cys Ser Ser Met Thr Ser
 340 345 350
 His Gly Ser Ser His Thr Ser Gly Val Glu Ser Gly Gly Lys Asp Arg

355 360 365
 Leu Glu Glu Asp Leu Gln Asp Asp Glu Ile Glu Met Leu Val Asp Asp
 370 375 380
 Pro Arg Asp Leu Glu Gln Met Asn Glu Glu Ser Leu Glu Val Ser Pro
 385 390 395 400
 Asp Met Cys Ile Tyr Ile Thr Glu Asp Met Leu Met Ser Arg Lys Leu
 405 410 415
 Asn Gly His Ser Gly Leu Ile Val Lys Glu Ile Gly Ser Ser Thr Ser
 420 425 430
 Ser Ser Ser Glu Thr Val Val Lys Leu Arg Gly Gln Ser Thr Asp Ser
 435 440 445
 Leu Pro Gln Thr Ile Cys Arg Lys Pro Lys Thr Ser Thr Asp Arg His
 450 455 460
 Ser Leu Ser Leu Asp Asp Ile Arg Leu Tyr Gln Lys Asp Phe Leu Arg
 465 470 475 480
 Ile Ala Gly Leu Cys Gln Asp Thr Ala Gln Ser Tyr Thr Phe Gly Cys
 485 490 495
 Gly His Glu Leu Asp Glu Glu Gly Leu Tyr Cys Asn Ser Cys Leu Ala
 500 505 510
 Gln Gln Cys Ile Asn Ile Gln Asp Ala Phe Pro Val Lys Arg Thr Ser
 515 520 525
 Lys Tyr Phe Ser Leu Asp Leu Thr His Asp Glu Val Pro Glu Phe Val
 530 535 540
 Val
 545

<210> 4361

<211> 168

<212> PRT

<213> Homo sapiens

<400> 4361

Met Cys Glu Pro Glu Cys Lys Thr Gln Leu Thr Ala Ser Thr Trp Arg
 1 5 10 15
 Ser Gly Thr Pro Gly His Thr Gly Pro Tyr Ala Gly Ser Leu Trp Asp

20 25 30
 Pro Lys Pro Leu Trp Val Val Leu Gly Asp Ser Ser Ser Trp Ala Phe
 35 40 45
 Pro Ala Asn Cys His Arg Cys Leu Cys Tyr Ser Ala Phe Leu His Leu
 50 55 60
 Gly Gln Asn Asn Phe Ala Glu Ala His Arg Phe Phe Thr Glu Ile Leu
 65 70 75 80
 Arg Met Asp Pro Arg Asn Ala Val Ala Asn Asn Asn Ala Ala Val Cys
 85 90 95
 Leu Leu Tyr Leu Gly Lys Leu Lys Asp Ser Leu Arg Gln Leu Glu Ala
 100 105 110
 Met Val Gln Gln Asp Pro Arg His Tyr Leu His Glu Ser Val Leu Phe
 115 120 125
 Asn Leu Thr Thr Met Tyr Glu Leu Glu Ser Ser Arg Ser Met Gln Lys
 130 135 140
 Lys Gln Ala Leu Leu Glu Ala Val Ala Gly Lys Glu Gly Asp Ser Phe
 145 150 155 160
 Asn Thr Gln Cys Leu Lys Leu Ala
 165

<210> 4362

<211> 108

<212> PRT

<213> Homo sapiens

<400> 4362

Met Pro Gln Ala Leu Pro Cys Leu Leu Pro Cys Arg Tyr Leu Ser His
 1 5 10 15
 Thr Glu Leu Ala Pro Leu Arg Ala Pro Leu Ile Pro Met Glu His Cys
 20 25 30
 Thr Thr Arg Phe Phe Glu Thr Cys Asp Leu Asp Asn Asp Lys Tyr Ile
 35 40 45
 Ala Leu Asp Glu Trp Ala Gly Cys Phe Gly Ile Lys Gln Ser Glu Cys
 50 55 60
 Leu Asn Lys Glu Ala Arg Gly Met Gly Arg Asn Thr Ala Pro Arg Val

65 70 75 80
 Leu Gly Cys His Pro Pro Thr Leu Arg Ser Leu Gly Leu Ser Val Val
 85 90 95
 Cys Pro Leu Cys Leu Ser Leu Leu Ser Leu Pro Ile
 100 105

<210> 4363

<211> 163

<212> PRT

<213> Homo sapiens

<400> 4363

Met Ser Asn Ala Ser Phe Leu Ser Val Cys Leu Leu Ala Glu Asn Pro
 1 5 10 15
 Val Gln Leu Ser Pro Gly Cys His Gly Lys Tyr Asp Lys Glu Arg Thr
 20 25 30
 Leu Gly Leu Gly Leu Lys Gly Leu Val Ile Gln Lys Thr Arg Glu Gly
 35 40 45
 Cys Thr Cys Arg Val Ile Tyr Ser Arg Asn Leu Ile Lys Tyr Leu Ala
 50 55 60
 His Arg Ser Tyr Lys Glu Ser Phe Gln Arg Gly Pro Leu Ala Thr Ala
 65 70 75 80
 Gly Phe Phe Val Arg Asn Ile Cys Val Phe Phe Ile Arg Gly Asn Lys
 85 90 95
 Thr Leu Gly Lys Glu Val Ser Ile Ile Tyr Ser His Phe Ser Ser Phe
 100 105 110
 Leu Asn Lys Thr Phe Ser Ser Arg Asn Thr Ala Phe Glu Gly Leu Cys
 115 120 125
 Phe Met Gln Pro Ala Ser Leu Val Asp Leu Phe Thr Arg Ser His Gln
 130 135 140
 Val Ile Ser Ser Ile Leu Gly Arg Trp Arg Lys Gln Thr Asp Thr Val
 145 150 155 160
 Ser Arg Cys

<210> 4364

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4364

```

Met Arg Gln Met Leu Pro Glu Glu Gln Leu Lys Cys Glu Phe Leu Leu
  1             5             10             15
Leu Lys Val Tyr Cys Asp Ser Lys Ser Cys Phe Phe Ala Ser Glu Pro
             20             25             30
Tyr Tyr Asn Arg Glu Gly Ser Gln Gly Pro Gln Lys Pro Met Trp Leu
             35             40             45
Asn Lys Val Lys Thr Ser Leu Asn Glu Gln Thr Tyr Thr Arg Val Glu
             50             55             60
Gly Phe Val Gln Asp Met Arg Leu Ile Phe His Asn His Lys Glu Phe
             65             70             75             80
Tyr Arg Glu Asp Lys Phe Thr Arg Leu Gly Ile Gln Val Gln Asp Ile
             85             90             95
Phe Glu Lys Asn Phe Arg Asn Ile Phe Ala Ile Gln Glu Thr Ser Lys
             100            105            110
Asn Ile Ile Met Phe Ile
             115

```

<210> 4365

<211> 222

<212> PRT

<213> Homo sapiens

<400> 4365

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Met Gly Thr Ser Ala Leu Thr Val Ser Ser Ala Leu Pro Ser Val Gly
  1             5             10             15
Thr Ser Ala His Thr Leu Ser Ser Ala Leu Pro Val His Gly Asp Val
             20             25             30
Cys Thr His Arg Met Ser Ser Ala Leu Pro Ser Val Asn Gly Asp Val

```

35	40	45
Cys Thr His Ser Val Leu Gly Thr Ala Leu Arg Gly Asp Val Cys Thr		
50	55	60
His Thr Val Leu Gly Thr Ala Leu Arg Gly Asp Val Cys Thr His Ser		
65	70	75
80		
Val Leu Gly Thr Ala Leu Arg Lys Trp Gly Arg Leu His Ser Gln Asn		
85	90	95
Val Leu Gly Thr Ala Leu Arg Gly Asp Val Cys Thr His Ser Val Leu		
100	105	110
Gly Thr Ala Leu Arg Gly Asp Val Cys Thr His Ser Val Leu Gly Thr		
115	120	125
Ala Leu Arg Gly Asp Val Cys Thr His Ser Val Leu Gly Thr Ala Leu		
130	135	140
Arg Gly Asp Val Cys Thr His Arg Met Ser Ser Ala Leu Pro Ser Met		
145	150	155
160		
Gly Thr Ser Ala Leu Thr Val Ser Ser Ala Leu Pro Ser Val Gly Thr		
165	170	175
Ser Ala Leu Thr Glu Cys Pro Arg His Cys Pro Pro Trp Gly Arg Leu		
180	185	190
His Ser Gln Cys Pro Arg His Cys Pro Pro Gly Arg Leu His Thr Val		
195	200	205
Ser Leu Ala Gln Leu Gly Leu Gly Ala Leu Ala Leu Glu Ala		
210	215	220

<210> 4366

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4366

Met Ser Ile Cys Leu Lys His Val Leu Phe Gly Ala Ala Val Ala Phe
1 5 10 15
Leu Phe Leu Cys Ile Phe Ser Phe Ser Phe Leu Phe Phe Phe Phe
20 25 30
Leu Phe Val Leu Arg Phe Cys Leu Asp Leu Leu Pro Arg Leu Glu Cys

```

          35              40              45
Ser Gly Val Ile Ser Ala His Cys Asn Leu Cys Leu Pro Gly Ser Ser
    50              55              60
Asn Cys Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Ala Cys
    65              70              75              80
His His Ala Gln Leu Ile Phe Cys Val Leu Val Glu Thr Gly Phe His
          85              90              95
His Val Gly Arg Leu Val Ser Asn Ser
          100              105

```

<210> 4367

<211> 588

<212> PRT

<213> Homo sapiens

<400> 4367

```

Met Asp Leu Arg Thr Ala Val Tyr Asn Ala Ala Arg Asp Gly Lys Leu
  1              5              10              15
Gln Leu Leu Gln Lys Leu Leu Ser Gly Arg Ser Arg Glu Glu Leu Asp
    20              25              30
Glu Leu Thr Gly Glu Val Ala Gly Gly Gly Thr Pro Leu Leu Ile Ala
    35              40              45
Ala Arg Tyr Gly His Leu Val Gly Glu His Gln Ala Asp Leu Glu Val
    50              55              60
Ala Asn Arg His Gly His Thr Cys His Met Ile Ser Cys Tyr Lys Gly
    65              70              75              80
His Arg Glu Ile Ala Arg Tyr Leu Leu Glu Gln Gly Ala Gln Val Asn
          85              90              95
Arg Arg Ser Ala Lys Gly Asn Thr Ala Leu His Asp Cys Ala Glu Ser
          100              105              110
Gly Ser Leu Glu Ile Leu Gln Leu Leu Leu Gly Cys Lys Ala Arg Met
          115              120              125
Glu Arg Asp Gly Tyr Gly Met Thr Pro Leu Leu Ala Ala Ser Val Thr
          130              135              140
Gly His Thr Asn Ile Val Glu Tyr Leu Ile Gln Glu Gln Pro Gly Gln

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145 150 155 160
 Glu Gln Val Ala Gly Gly Glu Ala Gln Pro Gly Leu Pro Gln Glu Asp
 165 170 175
 Pro Ser Thr Ser Gln Gly Cys Ala Gln Pro Gln Gly Ala Pro Cys Cys
 180 185 190
 Ser Ser Ser Pro Glu Glu Pro Leu Asn Gly Glu Ser Tyr Glu Ser Cys
 195 200 205
 Cys Pro Thr Ser Arg Glu Ala Ala Val Glu Ala Leu Glu Leu Pro Gly
 210 215 220
 Ala Thr Tyr Val Asp Lys Lys Arg Asp Leu Leu Gly Ala Leu Lys His
 225 230 235 240
 Trp Arg Arg Ala Met Glu Leu Arg His Gln Gly Gly Glu Tyr Leu Pro
 245 250 255
 Lys Pro Glu Pro Pro Gln Leu Val Leu Ala Tyr Asp Tyr Ser Arg Glu
 260 265 270
 Val Asn Thr Thr Glu Glu Leu Glu Ala Leu Ile Thr Asp Pro Asp Glu
 275 280 285
 Met Arg Met Gln Ala Leu Leu Ile Arg Glu Arg Ile Leu Gly Pro Ser
 290 295 300
 His Pro Asp Thr Ser Tyr Tyr Ile Arg Tyr Arg Gly Ala Val Tyr Ala
 305 310 315 320
 Asp Ser Gly Asn Phe Glu Arg Cys Ile Arg Leu Trp Lys Tyr Ala Leu
 325 330 335
 Asp Met Gln Gln Ser Asn Leu Glu Pro Leu Ser Pro Met Thr Ala Ser
 340 345 350
 Ser Phe Leu Ser Phe Ala Glu Leu Phe Ser Tyr Val Leu Gln Asp Arg
 355 360 365
 Ala Ala Lys Gly Ser Leu Gly Thr Gln Ile Gly Phe Ala Asp Leu Met
 370 375 380
 Gly Val Leu Thr Lys Gly Val Arg Glu Val Glu Arg Ala Leu Gln Leu
 385 390 395 400
 Pro Arg Glu Pro Gly Asp Ser Ala Gln Phe Thr Lys Ala Leu Ala Ile
 405 410 415
 Ile Leu His Leu Leu Tyr Leu Leu Glu Lys Val Glu Cys Thr Pro Ser
 420 425 430
 Gln Glu His Leu Lys His Gln Thr Val Tyr Arg Leu Leu Lys Cys Ala

435 440 445
 Pro Arg Gly Lys Asn Gly Phe Thr Pro Leu His Met Ala Val Asp Lys
 450 455 460
 Asp Thr Thr Asn Val Gly Arg Tyr Pro Val Gly Arg Phe Pro Ser Leu

 465 470 475 480
 His Val Val Lys Val Leu Leu Asp Cys Gly Ala Asp Pro Asp Ser Arg
 485 490 495
 Asp Phe Asp Asn Asn Thr Pro Leu His Ile Ala Ala Gln Asn Asn Cys
 500 505 510
 Pro Ala Ile Met Asn Ala Leu Ile Glu Ala Gly Ala His Met Asp Ala
 515 520 525
 Thr Asn Ala Phe Lys Lys Thr Ala Tyr Glu Leu Leu Asp Glu Lys Leu
 530 535 540
 Leu Ala Arg Gly Thr Met Gln Pro Phe Asn Tyr Val Thr Leu Gln Cys
 545 550 555 560
 Leu Ala Ala Arg Ala Leu Asp Lys Asn Lys Ile Pro Tyr Lys Gly Phe
 565 570 575
 Ile Pro Glu Asp Leu Glu Ala Phe Ile Glu Leu His
 580 585

<210> 4368

<211> 624

<212> PRT

<213> Homo sapiens

<400> 4368

Met Cys Met Cys Gln Ala Ser Pro Pro Pro Ala Ala Leu Ala Gly Cys
 1 5 10 15
 Leu Leu Ser Ser Cys Val Gln Pro Ala Arg Glu His Gly Gly Ala Phe
 20 25 30
 Ser Lys Ala Glu Trp Leu Ser Asn Cys Ile Asn Lys Tyr Gly Ser Pro
 35 40 45
 Tyr Thr Lys Asn Ser Gly Phe Ala Thr Cys Val Gln Asn Leu Pro Asp
 50 55 60

Gln Cys Thr Pro Asn Pro Cys Asp Arg Lys Gly Thr Gln Ala Cys Gln
 65 70 75 80
 Asp Leu Met Gly Asn Phe Phe Cys Leu Cys Lys Ala Gly Trp Gly Gly
 85 90 95
 Arg Leu Cys Asp Lys Asp Val Asn Glu Cys Ser Gln Glu Asn Gly Gly
 100 105 110
 Cys Leu Gln Ile Cys His Asn Lys Pro Gly Ser Phe His Cys Ser Cys
 115 120 125
 His Ser Gly Phe Glu Leu Ser Ser Asp Gly Arg Thr Cys Gln Asp Ile
 130 135 140
 Asp Glu Cys Ala Asp Ser Glu Ala Cys Gly Glu Ala Arg Cys Lys Asn
 145 150 155 160
 Leu Pro Gly Ser Tyr Ser Cys Leu Cys Asp Glu Gly Phe Ala Tyr Ser
 165 170 175
 Ser Gln Glu Lys Ala Cys Arg Asp Val Asp Glu Cys Leu Gln Gly Arg
 180 185 190
 Cys Glu Gln Val Cys Val Asn Ser Pro Gly Ser Tyr Thr Cys His Cys
 195 200 205
 Asp Gly Arg Gly Gly Leu Lys Leu Ser Gln Asp Met Asp Thr Cys Glu
 210 215 220
 Asp Ile Leu Pro Cys Val Pro Phe Ser Val Ala Lys Ser Val Lys Ser
 225 230 235 240
 Leu Tyr Leu Gly Arg Met Phe Ser Gly Thr Pro Val Ile Arg Leu Arg
 245 250 255
 Phe Lys Arg Leu Gln Pro Thr Arg Leu Val Ala Glu Phe Asp Phe Arg
 260 265 270
 Thr Phe Asp Pro Glu Gly Ile Leu Leu Phe Ala Gly Gly His Gln Asp
 275 280 285
 Ser Thr Trp Ile Val Leu Ala Leu Arg Ala Gly Arg Leu Glu Leu Gln
 290 295 300
 Leu Arg Tyr Asn Gly Val Gly Arg Val Thr Ser Ser Gly Pro Val Ile
 305 310 315 320
 Asn His Gly Met Trp Gln Thr Ile Ser Val Glu Glu Leu Ala Arg Asn
 325 330 335
 Leu Val Ile Lys Val Asn Arg Asp Ala Val Met Lys Ile Ala Val Ala
 340 345 350

Gly Asp Leu Phe Gln Pro Glu Arg Gly Leu Tyr His Leu Asn Leu Thr
 355 360 365
 Val Gly Gly Ile Pro Phe His Glu Lys Asp Leu Val Gln Pro Ile Asn
 370 375 380
 Pro Arg Leu Asp Gly Cys Met Arg Ser Trp Asn Trp Leu Asn Gly Glu
 385 390 395 400
 Asp Thr Thr Ile Gln Glu Thr Val Lys Val Asn Thr Arg Met Gln Cys
 405 410 415
 Phe Ser Val Thr Glu Arg Gly Ser Phe Tyr Pro Gly Ser Gly Phe Ala
 420 425 430
 Phe Tyr Ser Leu Asp Tyr Met Arg Thr Pro Leu Asp Val Gly Thr Glu
 435 440 445
 Ser Thr Trp Glu Val Glu Val Val Ala His Ile Arg Pro Ala Ala Asp
 450 455 460
 Thr Gly Val Leu Phe Ala Leu Trp Ala Pro Asp Leu Arg Ala Val Pro
 465 470 475 480
 Leu Ser Val Ala Leu Val Asp Tyr His Ser Thr Lys Lys Leu Lys Lys
 485 490 495
 Gln Leu Val Val Leu Ala Val Glu His Thr Ala Leu Ala Leu Met Glu
 500 505 510
 Ile Lys Val Cys Asp Gly Gln Glu His Val Val Thr Val Ser Leu Arg
 515 520 525
 Asp Gly Glu Ala Thr Leu Glu Val Asp Gly Thr Arg Gly Gln Ser Glu
 530 535 540
 Val Ser Ala Ala Gln Leu Gln Glu Arg Leu Ala Val Leu Glu Arg His
 545 550 555 560
 Leu Arg Ser Pro Val Leu Thr Phe Ala Gly Gly Leu Pro Asp Val Pro
 565 570 575
 Val Thr Ser Ala Pro Val Thr Ala Phe Tyr Arg Gly Cys Met Thr Leu
 580 585 590
 Glu Val Asn Arg Arg Leu Leu Asp Leu Asp Glu Ala Ala Tyr Lys His
 595 600 605
 Ser Asp Ile Thr Ala His Ser Cys Pro Pro Val Glu Pro Ala Ala Ala
 610 615 620

<210> 4369

<211> 528

<212> PRT

<213> Homo sapiens

<400> 4369

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Met Ala Thr Ala Met Asp Trp Leu Pro Trp Ser Leu Leu Leu Phe Ser
  1             5             10             15
Leu Met Cys Glu Thr Ser Ala Phe Tyr Val Pro Gly Val Ala Pro Ile
             20             25             30
Asn Phe His Gln Asn Asp Pro Val Glu Ile Lys Ala Val Lys Leu Thr
             35             40             45
Ser Ser Arg Thr Gln Leu Pro Tyr Glu Tyr Tyr Ser Leu Pro Phe Cys
             50             55             60
Gln Pro Ser Lys Ile Thr Tyr Lys Ala Glu Asn Leu Gly Glu Val Leu
             65             70             75             80
Arg Glu Asp Gln Glu His Thr Tyr Arg Val Val Arg Phe Glu Val Ile
             85             90             95
Pro Gln Ser Ile Arg Leu Glu Asp Leu Lys Ala Asp Glu Lys Ser Ser
             100            105            110
Cys Thr Leu Pro Glu Gly Thr Asn Ser Ser Pro Gln Glu Ile Asp Pro
             115            120            125
Thr Lys Glu Asn Gln Leu Tyr Phe Thr Tyr Ser Val His Trp Glu Glu
             130            135            140
Ser Asp Ile Lys Trp Ala Ser Arg Trp Asp Thr Tyr Leu Thr Met Ser
             145            150            155            160
Asp Val Gln Ile His Trp Phe Ser Ile Ile Asn Ser Val Val Val Val
             165            170            175
Phe Phe Leu Ser Gly Ile Leu Ser Met Ile Ile Ile Arg Thr Leu Arg
             180            185            190
Lys Asp Ile Ala Asn Tyr Asn Lys Glu Asp Asp Ile Glu Asp Thr Met
             195            200            205
Glu Glu Ser Gly Trp Lys Leu Val His Gly Asp Val Phe Arg Pro Pro
             210            215            220
Gln Tyr Pro Met Ile Leu Ser Ser Leu Leu Gly Ser Gly Ile Gln Leu
             225            230            235            240

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Phe Cys Met Ile Leu Ile Val Ile Phe Val Ala Met Leu Gly Met Leu
 245 250 255
 Ser Pro Ser Ser Arg Gly Ala Leu Met Thr Thr Ala Cys Phe Leu Phe
 260 265 270
 Met Phe Met Gly Val Phe Gly Gly Phe Ser Ala Gly Arg Leu Tyr Arg
 275 280 285
 Thr Leu Lys Gly His Arg Trp Lys Lys Arg Ala Phe Cys Thr Ala Thr
 290 295 300
 Leu Tyr Pro Gly Val Val Phe Gly Ile Cys Phe Val Leu Asn Cys Phe
 305 310 315 320
 Ile Trp Gly Lys His Ser Ser Gly Ala Val Pro Phe Pro Thr Met Val
 325 330 335
 Ala Leu Leu Cys Met Trp Phe Gly Ile Ser Leu Pro Leu Val Tyr Leu
 340 345 350
 Gly Tyr Tyr Phe Gly Phe Arg Lys Gln Pro Tyr Asp Asn Pro Val Arg
 355 360 365
 Thr Asn Gln Ile Pro Arg Gln Ile Pro Glu Gln Arg Trp Tyr Met Asn
 370 375 380
 Arg Phe Val Gly Ile Leu Met Ala Gly Ile Leu Pro Phe Gly Ala Met
 385 390 395 400
 Phe Ile Glu Leu Phe Phe Ile Phe Ser Ala Ile Trp Glu Asn Gln Phe
 405 410 415
 Tyr Tyr Leu Phe Gly Phe Leu Phe Leu Val Phe Ile Ile Leu Val Val
 420 425 430
 Ser Cys Ser Gln Ile Ser Ile Val Met Val Tyr Phe Gln Leu Cys Ala
 435 440 445
 Glu Asp Tyr Arg Trp Trp Trp Arg Asn Phe Leu Val Ser Gly Gly Ser
 450 455 460
 Ala Phe Tyr Val Leu Val Tyr Ala Ile Phe Tyr Phe Val Asn Lys Leu
 465 470 475 480
 Asp Ile Val Glu Phe Ile Pro Ser Leu Leu Tyr Phe Gly Tyr Thr Ala
 485 490 495
 Leu Met Val Leu Ser Phe Trp Leu Leu Thr Gly Thr Ile Gly Phe Tyr
 500 505 510
 Ala Ala Tyr Met Phe Val Arg Lys Ile Tyr Ala Ala Val Lys Ile Asp

515

520

525

<210> 4370

<211> 165

<212> PRT

<213> Homo sapiens

<400> 4370

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Met Asn His Pro Phe Gln Gly Ser His Arg Gln Thr Pro Asp Phe Gly
  1             5             10             15
Glu His Leu Ala Leu Leu Pro Pro Pro Ser Ser Leu Pro Pro Pro
      20             25             30
Met Pro Phe Pro Tyr Pro Leu Pro Gln Pro Ser Pro Pro Pro Leu Phe
      35             40             45
Pro Pro Leu Pro Gln Asp Thr Pro Phe Phe Pro Gly Gln Pro Phe Pro
      50             55             60
Pro His Glu Phe Phe Asn Tyr Asn Pro Val Glu Asp Phe Ser Met Pro
      65             70             75             80
Pro His Leu Gly Cys Gly Pro Gly Val Asn Phe Val Pro Gly Pro Leu
      85             90             95
Pro Pro Pro Ile Pro Gly Pro Asn Pro His Gly Gln His Trp Gly Pro
      100            105            110
Val Val His Arg Gly Met Pro Arg Tyr Val Pro Asn Ser Pro Tyr His
      115            120            125
Val Arg Arg Met Gly Gly Pro Cys Arg Gln Arg Leu Arg His Ser Glu
      130            135            140
Arg Leu Ile His Thr Tyr Lys Leu Asp Arg Arg Pro Pro Ala His Ser
      145            150            155            160
Gly Thr Trp Pro Gly
      165

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<210> 4371

<211> 367

<212> PRT

<213> Homo sapiens

<400> 4371

Met Ile Val Arg Pro Ser Thr Ala Thr Trp Asn Ser Pro Thr Met Pro
 1 5 10 15
 Trp Pro Leu Leu Leu Leu Leu Ala Val Ser Gly Ala Gln Thr Thr Arg
 20 25 30
 Pro Cys Phe Pro Gly Cys Gln Cys Glu Val Glu Thr Phe Gly Leu Phe
 35 40 45
 Asp Ser Phe Ser Leu Thr Arg Val Asp Cys Ser Gly Leu Gly Pro His
 50 55 60
 Ile Met Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu Asp Leu Ser
 65 70 75 80
 Ser Asn Arg Leu Glu Met Val Asn Glu Ser Val Leu Ala Gly Pro Gly
 85 90 95
 Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu Leu Thr Ser
 100 105 110
 Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu Ser Leu Asp
 115 120 125
 Leu Ser His Asn Gly Leu Thr Ala Leu Pro Ala Glu Ser Phe Thr Ser
 130 135 140
 Ser Pro Leu Ser Asp Val Asn Leu Ser His Asn Gln Leu Arg Glu Val
 145 150 155 160
 Ser Val Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala Leu His Val
 165 170 175
 Asp Leu Ser His Asn Leu Ile His Arg Leu Val Pro His Pro Thr Arg
 180 185 190
 Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser Leu Asn Leu Ala Trp Asn
 195 200 205
 Arg Leu His Ala Val Pro Asn Leu Arg Asp Leu Pro Leu Arg Tyr Leu
 210 215 220
 Ser Leu Asp Gly Asn Pro Leu Ala Val Ile Gly Pro Gly Ala Phe Ala
 225 230 235 240
 Gly Leu Gly Gly Leu Thr His Leu Ser Leu Ala Ser Leu Gln Arg Leu
 245 250 255
 Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu Leu Pro Gly Leu Gln Val

260	265	270
Leu Asp Leu Ser Gly Asn Pro Lys	Leu Asn Trp Ala Gly Ala Glu Val	
275	280	285
Phe Ser Gly Leu Ser Ser Leu Gln Glu	Leu Asp Leu Ser Gly Thr Asn	
290	295	300
Leu Val Pro Leu Pro Glu Ala Leu Leu Leu His	Leu Pro Ala Leu Gln	
305	310	315
Ser Val Ser Val Gly Gln Asp Val Arg Cys Arg Arg	Leu Val Arg Glu	
325	330	335
Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser Pro Lys	Val Ala Leu His	
340	345	350
Cys Val Asp Thr Arg Glu Ser Ala Ala Arg Gly Pro Thr	Ile Leu	
355	360	365

<210> 4372

<211> 467

<212> PRT

<213> Homo sapiens

<400> 4372

Met Ser Ala Arg Val Pro Val Ser Leu Cys Ile Tyr Ile His Ala Cys	
1	15
Val Pro Val Phe Leu Arg Val Leu Val Cys Ala Arg Val His Leu Cys	
20	30
Val Cys Gln Ser Met Cys Ala Cys Val Cys Leu Ser Ala Tyr Pro Cys	
35	45
Val His Val Cys Val Cys Gln Arg Ile Arg Val Cys Met Cys Val Ser	
50	60
Val Ser Leu Thr Met Cys Ala Cys Val Cys Gln Cys Ile Arg Val Cys	
65	80
Ile Cys Val Ser Val His Val Ser Ala Cys Ala Cys Val Tyr Leu Cys	
85	95
Val Ser Ile Lys Gly Pro Pro Arg Pro Gly Ala His Arg Pro Pro Gln	
100	110
Arg Thr Leu His Cys Ser Asp Ser Ser Ser Asp Thr Asp Ser Phe Tyr	

115	120	125
Gly Ala Val Glu Arg Pro Val Asp Ile Ser Leu Ser Pro Tyr Pro Thr		
130	135	140
Asp Asn Glu Asp Tyr Glu His Asp Asp Glu Asp Asp Ser Tyr Leu Glu		
145	150	155
Pro Asp Ser Pro Glu Pro Gly Arg Leu Glu Asp Ala Leu Met His Pro		
165	170	175
Pro Ala Tyr Pro Pro Pro Pro Val Pro Thr Pro Arg Lys Pro Ala Phe		
180	185	190
Ser Asp Met Pro Arg Ala His Ser Phe Thr Ser Lys Gly Pro Gly Pro		
195	200	205
Leu Leu Pro Pro Pro Pro Pro Lys His Gly Leu Pro Asp Val Gly Leu		
210	215	220
Ala Ala Glu Asp Ser Lys Arg Asp Pro Leu Cys Pro Arg Arg Ala Glu		
225	230	235
Pro Cys Pro Arg Val Pro Ala Thr Pro Arg Arg Met Ser Asp Pro Pro		
245	250	255
Leu Ser Thr Met Pro Thr Ala Pro Gly Leu Arg Lys Pro Pro Cys Phe		
260	265	270
Arg Glu Ser Ala Ser Pro Ser Pro Glu Pro Trp Thr Pro Gly His Gly		
275	280	285
Ala Cys Ser Thr Ser Ser Ala Ala Ile Met Ala Thr Ala Thr Ser Arg		
290	295	300
Asn Cys Asp Lys Leu Lys Ser Phe His Leu Ser Pro Arg Gly Pro Pro		
305	310	315
Thr Ser Glu Pro Pro Pro Val Pro Ala Asn Lys Pro Lys Phe Leu Lys		
325	330	335
Ile Ala Glu Glu Asp Pro Pro Arg Glu Ala Ala Met Pro Gly Leu Phe		
340	345	350
Val Pro Pro Val Ser Pro Arg Pro Pro Ala Leu Lys Leu Pro Val Pro		
355	360	365
Glu Ala Met Ala Arg Pro Ala Val Leu Pro Arg Pro Glu Lys Pro Gln		
370	375	380
Leu Pro His Leu Gln Arg Ser Pro Pro Asp Gly Gln Ser Phe Arg Ser		
385	390	395
Phe Ser Phe Glu Lys Pro Arg Gln Pro Ser Gln Ala Asp Thr Gly Gly		

405 410 415
 Asp Asp Ser Asp Glu Asp Tyr Glu Lys Val Pro Leu Pro Asn Ser Val
 420 425 430
 Phe Val Asn Thr Thr Glu Ser Cys Glu Val Glu Arg Ser Ala Gln Ser
 435 440 445
 Pro Val Cys Ala Gly Ser Ser Ala Met Pro Gly Phe Leu Leu Leu Cys
 450 455 460
 Pro Ser His
 465

<210> 4373
 <211> 1004
 <212> PRT
 <213> Homo sapiens

<400> 4373
 Met Glu Val Thr Asp Arg Lys Cys Ser Glu Leu Leu Tyr Val Phe Gln
 1 5 10 15
 Thr Gln Leu Ala Leu Lys Leu Leu Gln Cys Leu Lys Val Thr Asp Ala
 20 25 30
 Pro His Phe Tyr Gly Leu Pro Ser Leu Glu Arg Thr Leu Arg Gly Met
 35 40 45
 Ala Asn Leu Thr Ala Phe Pro Gly Trp Ser Ser His Ser Pro Leu Thr
 50 55 60
 Lys Pro Leu Asp Ile Cys Val Lys Tyr Leu Ser Gly Leu Leu Glu Val
 65 70 75 80
 Ile Thr Ser Phe Tyr Val Glu Arg Gly Gly Asn Ala Met Ser Phe Met
 85 90 95
 Gly Lys Gly Val Thr Lys Ser Thr Ile Leu Cys Leu Leu His Leu Ser
 100 105 110
 His Glu Met Met Ala Gln Ala Gly Ser Leu Glu Trp Met Ser Leu Trp
 115 120 125
 Phe Leu Pro Leu Gly Ser His Ser Glu Glu His Ile Pro Thr Gln Gln
 130 135 140

Gly	Leu	Ala	Trp	Leu	Ile	Pro	Leu	Trp	Val	Asp	Arg	Asp	Pro	Glu	Val
145					150					155					160
Arg	Phe	Thr	Ser	Leu	Gly	Leu	Gly	Ser	Ala	Leu	Thr	Thr	Leu	Glu	Thr
				165					170					175	
Gly	Cys	Val	Ala	Leu	Ala	Asn	Ser	Cys	Gln	Asn	Ile	Ser	Gly	Gly	Leu
			180						185					190	
Trp	Gly	Thr	Val	Val	Asn	Ile	Leu	Leu	Asp	Gln	Ser	Glu	Cys	Ser	Met
	195					200						205			
Val	Arg	Arg	Glu	Ala	Ala	Phe	Ile	Leu	Gln	Asn	Leu	Leu	Val	Ile	Pro
	210					215						220			
Met	Pro	Thr	Glu	Ile	Ile	Lys	Asp	Tyr	Thr	Trp	Gln	Gly	Pro	Cys	Val
225				230						235				240	
His	Asp	Glu	Asp	Ser	Gly	Leu	Ser	Leu	Ile	Gly	Lys	Pro	Ala	Leu	Gln
			245						250					255	
Ala	Leu	Leu	Tyr	His	Cys	His	Phe	Tyr	Glu	His	Leu	Asn	Gln	Met	Val
		260						265					270		
Lys	His	Cys	Tyr	Leu	Gly	Arg	Cys	Met	Phe	Asp	Leu	Asn	Phe	Ser	Ala
	275						280						285		
Phe	Asp	Arg	Asn	Ser	Glu	Ser	Asn	Asp	Leu	Asn	Gly	Leu	Asp	Asp	Ser
	290				295							300			
Phe	Lys	Phe	Trp	Arg	Ala	Pro	Ser	Arg	Thr	Ser	Gln	Asp	Arg	Asp	Pro
305				310							315			320	
Ser	Ser	Leu	Ser	Thr	Ser	Glu	Thr	Thr	Val	Ala	Pro	Ser	Leu	Gly	Ser
			325					330					335		
Thr	Glu	Phe	Gln	Pro	Leu	Val	Gln	Ser	Thr	Thr	Leu	Leu	Pro	Glu	Ala
		340						345					350		
Ser	His	Asp	Gln	Phe	Val	Ala	Gln	Gly	His	Gln	Glu	Gly	Thr	Ser	Pro
	355					360						365			
Arg	Pro	Pro	His	Asp	Ser	Ser	Leu	Ser	Ala	Pro	Leu	Pro	Lys	Leu	Cys
	370					375					380				
Val	Phe	Val	Thr	Pro	Ser	Leu	Leu	Ser	Ala	Met	Cys	Ser	Leu	Leu	Asp
385				390					395				400		
Asn	Leu	Leu	Thr	Ile	Ala	Pro	Arg	Asp	Thr	Ala	Lys	Ala	Phe	Arg	Gln
			405						410				415		
Ala	His	Leu	Ile	Glu	Leu	Leu	Cys	Ser	Ile	Ala	Asp	Ala	Thr	Leu	Ile
		420						425					430		

Gln Thr Cys Val Gln Glu Leu Arg Ala Leu Leu Pro Ser Ser Pro Pro
 435 440 445
 Ala Glu His Thr Gln Ala Gln Val Ser Phe Leu Leu Glu Tyr Leu Ser
 450 455 460
 Ser Leu Ser Arg Leu Leu Gln Ser Cys Leu Leu Val Glu Pro Asp Leu
 465 470 475 480
 Val Ile Gln Asp Glu Leu Val Lys Pro Leu Ile Thr Asn Ile Ile Gly
 485 490 495
 Ile Leu Thr Ile Cys Thr Lys Asp Val Leu Asp Lys Glu Leu Ile Ser
 500 505 510
 Ala Phe Tyr His Thr Trp Thr His Leu Phe Asn Leu Leu Ala Met Leu
 515 520 525
 Leu Arg Lys Ala Gly Ala Ile Thr Leu Pro Ser Val Thr Val Ala Leu
 530 535 540
 Ala Lys His Trp Thr Ala Ala Ile Asp Met Phe Cys Thr Cys Ala Gly
 545 550 555 560
 Leu Ser Ala Thr Cys Pro Ala Leu Tyr Thr Ala Ser Leu Gln Phe Leu
 565 570 575
 Ser Val Leu Leu Thr Glu Glu Ala Lys Gly His Leu Gln Ala Lys Ser
 580 585 590
 Lys Thr His Leu Cys Cys Ser Pro Thr Val Ala Ser Leu Leu Asp Asp
 595 600 605
 Ser Gln Glu Asn Gln Lys Ser Leu Glu Gln Leu Ser Asp Val Ile Leu
 610 615 620
 Gln Cys Tyr Glu Gly Lys Ser Ser Lys Asp Ile Leu Lys Arg Val Ala
 625 630 635 640
 Ala Asn Ala Leu Met Ser Leu Leu Ala Val Ser Arg Arg Ala Gln Lys
 645 650 655
 His Ala Leu Lys Ala Asn Leu Ile Asp Asn Cys Met Glu Gln Met Lys
 660 665 670
 His Ile Asn Ala Gln Leu Asn Leu Asp Ser Leu Arg Pro Gly Lys Ala
 675 680 685
 Ala Leu Lys Lys Lys Glu Asp Gly Val Ile Lys Glu Leu Ser Ile Ala
 690 695 700
 Met Gln Leu Leu Arg Asn Cys Leu Tyr Gln Asn Glu Glu Cys Lys Glu

705	710	715	720
Ala Ala Leu Glu Ala His Leu Val Pro Val Leu His Ser Leu Trp Pro			
725	730	735	
Trp Ile Leu Met Asp Asp Ser Leu Met Gln Ile Ser Leu Gln Leu Leu			
740	745	750	
Cys Val Tyr Thr Ala Asn Phe Pro Asn Gly Cys Ser Ser Leu Cys Trp			
755	760	765	
Ser Ser Cys Gly Gln His Pro Val Gln Ala Thr His Arg Gly Ala Val			
770	775	780	
Ser Asn Ser Leu Met Leu Cys Ile Leu Lys Leu Ala Ser Gln Met Pro			
785	790	795	800
Leu Glu Asn Thr Thr Val Gln Gln Met Val Phe Met Leu Leu Ser Asn			
805	810	815	
Leu Ala Leu Ser His Asp Cys Lys Gly Val Ile Gln Lys Ser Asn Phe			
820	825	830	
Leu Gln Asn Phe Leu Ser Leu Ala Leu Pro Lys Gly Gly Asn Lys His			
835	840	845	
Leu Ser Asn Leu Thr Ile Leu Trp Leu Lys Leu Leu Leu Asn Ile Ser			
850	855	860	
Ser Gly Glu Asp Gly Gln Gln Met Ile Leu Arg Leu Asp Gly Cys Leu			
865	870	875	880
Asp Leu Leu Thr Glu Met Ser Lys Tyr Lys His Lys Ser Ser Pro Leu			
885	890	895	
Leu Pro Leu Leu Ile Phe His Asn Val Cys Phe Ser Pro Ala Asn Lys			
900	905	910	
Pro Lys Ile Leu Ala Asn Glu Lys Val Ile Thr Val Leu Ala Ala Cys			
915	920	925	
Leu Glu Ser Glu Asn Gln Asn Ala Gln Arg Ile Gly Ala Ala Ala Leu			
930	935	940	
Trp Ala Leu Ile Tyr Asn Tyr Gln Lys Ala Lys Thr Ala Leu Lys Ser			
945	950	955	960
Pro Ser Val Lys Arg Arg Val Asp Glu Ala Tyr Ser Leu Ala Lys Lys			
965	970	975	
Thr Phe Pro Asn Ser Glu Ala Asn Pro Leu Asn Ala Tyr Tyr Leu Lys			
980	985	990	
Cys Leu Glu Asn Leu Val Gln Leu Leu Asn Ser Ser			

995

1000

<210> 4374

<211> 550

<212> PRT

<213> Homo sapiens

<400> 4374

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Met Gly Trp Ser Asp Leu Gln Pro Ala Met Gly Gly Glu Ala Glu Arg
 1             5             10             15
Phe Gln Ala Gln Leu Glu Val Lys Leu Val Thr Gly Gly Ser Pro Val
      20             25             30
Val Phe Thr Gly Asn Leu Thr Arg Gln Val Gly Ser Lys Leu Ala Phe
      35             40             45
Ser Ala Ser Leu Ser His Leu Leu Ser Asp Gln Ala Asn Val Thr Ala
      50             55             60
Leu Leu Glu Arg Lys Glu Glu Asn Gly Arg Arg Val Ala Ala Leu Gly
      65             70             75             80
Ala Glu Leu Phe Val Pro Gly Leu Val Gly Leu Arg Ala Leu Gly Leu
      85             90             95
Leu Gln Gln Gln Gly Gln Leu Trp Thr Asn Ser Leu Arg Ile Gln Tyr
      100            105            110
Ser Leu Leu Gly Gln Ala Lys Gln Ala Ala His Glu Cys Ser Thr Ser
      115            120            125
Gln Lys Leu Arg Ala Asp Ser Gly Ser Asp Gly Ala Tyr Arg Leu Glu
      130            135            140
Leu Arg His Glu Leu His Cys Thr Gln Ile Leu Ala Phe Ser His Lys
      145            150            155            160
Val Gln Leu Trp His Glu Glu Asp Ser Gly His Leu His Ser Gln Leu
      165            170            175
Glu Val Ser Tyr Gly Lys Gln Trp Asp Lys Asn Ser Asn Lys Arg His
      180            185            190
Leu Arg Val Ser Gln Thr Phe Lys Asn Asp Ser Gly Pro Ala Leu Ser
      195            200            205
Asn His Phe Met Glu Phe Val Leu Gln Val Pro Glu Arg Gln Val Asp

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210	215	220	
Cys Arg Val Gln Leu Tyr His Leu Ser Leu Arg Leu Pro Tyr Val Glu			
225	230	235	240
Ser Ser Ser His Leu Lys Val Gln Tyr Asn Gly Arg Pro Leu Phe Val			
245	250	255	
Ala Gly Gly Gln Trp Lys Asp Thr Ser Arg Ala Thr Leu Trp Lys Trp			
260	265	270	
Glu Gly Val Leu Asn Leu Asp Ser Pro Trp Leu Met Val Ser Ala Ala			
275	280	285	
His Arg Leu Tyr Trp Pro His Arg Ala Val Phe Gln Ala Val Leu Glu			
290	295	300	
Leu Thr Leu Gly Lys Ala Trp Thr Leu Lys Asp Leu Val Val Ser Val			
305	310	315	320
Gly Cys Arg Ser Gln Gly Pro Asn Arg Glu Gly Lys Ile Gln Val Tyr			
325	330	335	
Thr Ala Ala Thr Thr Tyr Leu Arg Val Ser Thr Val Thr Val Leu Ala			
340	345	350	
Gln Ser Leu Phe His Ser Trp Ser Glu Leu Glu Ser Ala Trp Asn Thr			
355	360	365	
Ala Val Gln Gly Glu Ile His Ala Glu Asn Ser Arg Asp Arg Lys Ile			
370	375	380	
Leu Asn Cys Trp Leu Lys Gly Pro Gln Gln Glu Leu Asn Leu Thr Ala			
385	390	395	400
Ala Tyr Arg His Leu Glu Trp Pro Arg Lys Thr Gln Val Ser Leu Thr			
405	410	415	
Ala Val Trp Ile Gly Ala Gln Gly Gln Pro Arg Gly Leu Gln Leu Glu			
420	425	430	
Gly Glu Leu Glu Glu Leu Arg Gln Asp Arg Thr Leu Tyr Arg Lys Arg			
435	440	445	
Gly Ala Leu Leu Leu Arg His Pro Leu His Leu Pro Ile Pro Gln Ser			
450	455	460	
Leu Leu Leu Gln Glu Thr Phe Thr Ala Asp Arg Arg His Gln Arg Tyr			
465	470	475	480
Ser Leu Glu Thr Arg Val Val Leu Asn Gly Arg Glu Glu Thr Leu Gln			
485	490	495	
Thr Met Val Leu Gly Cys Gln Ala Gly His Pro Tyr Val Cys Ala Gly			

500 505 510
 Leu Met His Pro Tyr Asp Gly Lys Val Ile Pro Arg Asn Thr Glu Gly
 515 520 525
 Cys Leu Val Thr Trp Asn Gln His Thr Ser Leu Ala Leu Leu Ser Gly
 530 535 540
 Leu Glu Ser Gly Val Gln
 545 550

<210> 4375

<211> 147

<212> PRT

<213> Homo sapiens

<400> 4375

Met Gln Ala Pro Ile Pro Pro Pro Glu Pro Phe Cys Ala Ser Ser Gly
 1 5 10 15
 Pro Pro Cys Trp Ser Thr Phe Ser Arg Lys Leu Ser Gln Ala Arg Pro
 20 25 30
 Val Lys Leu Ser Phe Leu Pro Gln Ser Ser Leu Ala Pro Pro Ala His
 35 40 45
 Thr Ala His Gln Ala Leu Ala Leu Arg Pro Gln Pro Ala Ser His Arg
 50 55 60
 Val Gly Pro Phe Leu Pro Gln Pro Gly Gln Gly Thr Ser Ser Val Ile
 65 70 75 80
 Ser His Thr Pro Ser Thr Ala Arg Ile Ala Gly Ala His Ile Gly Leu
 85 90 95
 His Thr Gly Pro Trp Leu Leu Leu Leu Pro Gly Trp Ala Gly Arg Gln
 100 105 110
 Gly Pro Gly Trp Ala Trp Gly Gly Ser Ser Leu Trp Ala Gly Leu Thr
 115 120 125
 Val Ser Thr Val Trp Gly Phe Arg Glu Asp Cys Ser Ser Pro Gly Leu
 130 135 140
 Pro Gly Val
 145

<210> 4376

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4376

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Met Gly Thr Ala Tyr Val Ala Leu Pro Gln Pro Ser Ser Met Gln Trp
  1              5              10              15
Pro Gly Ser Asn Gln Arg Ser Pro Gly Arg Val Ser Cys Lys Asn Leu
      20              25              30
Gly Lys Arg Ala Gln Gly Gly Cys Arg Leu Leu Thr Ala Cys Leu Asp
      35              40              45
Arg Pro His Gly Ala Ser Pro His Ile Ala Arg Ala Leu Ala Ser Pro
      50              55              60
Leu Pro Thr Cys Lys Arg Gly Cys Trp Gln Gln His Phe Thr Thr Arg
      65              70              75              80
Asn Leu Tyr Ser Asn Ser Lys His Ala Leu Thr His Ser Val Asn Tyr
      85              90              95
Pro Leu Ser Trp Pro Thr Glu Val Asp Ser Phe Arg Pro Pro Phe Val
      100             105             110
Gln Met Arg Lys Leu Arg Leu Thr Pro Lys Pro Gly Gly Phe Gln Met
      115             120             125
Trp Ser Gly Ser Leu Cys Pro Gly Asp Glu Gly Thr Arg Arg Val Trp
      130             135             140
Ser Arg Ala Gly Val Gly Leu Arg Cys Ser Arg Leu Ala Val Lys Gly
      145             150             155             160
Ala Arg Cys Glu Pro Gly Cys Trp Val
      165

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<210> 4377

<211> 1965

<212> DNA

<213> Homo sapiens

<400> 4377

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gcctcttagc ccaggcccca agactataig gtcctgtigg cagcagccaa tgttgtttca	120
ggaagcaaca gcatttgaaa atatgaccaa agattggaat tatttagaag gctctcaaaa	180
ggattgctac agagacacaa tgcctggacag ttatgagaac acggtcccac agggatcctt	240
cttacagctc tccatgalgc ctcagagagc tggaaatgat ccacctgggg tttcaaatgc	300
aagtgaaatg gaaatggaga taagtaacat gagagaaaag tttcttatga gtgtaacaaa	360
gttagtagaa agcaaaagt tacaacagcaa ggtattttcc aaagaaaagt actttcaaac	420
aataaaggaa gttaaagaag cttaaagaaa agggaagaag tcatcacgtg attatcgccg	480
tgcagcaaaa tatgatgtga tctctgtaca gggcacagag aaactgatag aggctactca	540
tggagaacgt gatcgaatac ggtattatgt acataaggaa gagttgtttg atattcttca	600
tgatacacat ctacgtattg gacatgggtg gcggacacgc atgctcaagg agctgcaagg	660
aaaataiggg aatgtcacca aagaagttat tgtcttatat ctgactctgt gtaaacagtg	720
ccaccagaag aaccagttac ccaagagagg ccttgcacca aagcccatga cttttaagga	780
catagactcc acatgccaag ttgaaatact tgacatgcag tccagtgccg atggtgagtt	840
caagttcatt ttatactacc aggatcacct aaccaagttt attattttac ggccattlaag	900
aaccaaacag gcccatgagg tggctcagtg cttgttagat attttcaca tttcttggtac	960
accagtggtg ttagactctg acagtggcgt tgagttcaca aaccagggtg ttcattgagct	1020
caatgagttg tggccagacc taaagattgt atcttgtaag taccaccctg gccaaagcca	1080
gggtccctg gaaggagcaa gccgtgatgt aaagaacatg ataagtacct ggatgcagag	1140
taaccactca tgtcactggg ccaaaggcct ccgattcatg cagatgggtg ggaatcaggc	1200
tttcgacgtt tcttgcagc aaagtcatt tgaggcaatg tttggctata aagccaaatt	1260
tgggtatata tcttcaaaact tgccccggga aactgtggct actttacaaa cggaagaaga	1320
gctagaaatt gctgaagaac agctagaaaa tagcctttgg atcaggcagg aagaaagggc	1380
tgagattgga gcagacagat ctgatatgga cgtatgacat gatccactc ctgaagcttc	1440
agaaccagc acctcacaag ggacttccgg tctctctgct tggatgaacag atggctgctg	1500
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cagaggaaaa gatgaaggc tgcactctca ggtcaagttg tacaatggcag tcttgtctca	1620
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gggtcacttg agatcaggag ttaagacta gccgtggcca catgatgaaa cctgtctct	1800
actgaaaata tagaaattgg ccaggcttgg agctgtgtgc ctgtaatccc agctaaccag	1860
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<210> 4378

<211> 2607

<212> DNA

<213> Homo sapiens

<400> 4378

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aacgcggtcg ccatggaccg cccagatgag gggcctccgg ccaagacctg ccgcctgagc   180
agctccgagt ctccacagcg cgacctgccc ccgcgcgcgc cgccgcgcgc gctcctccga   240
ctgcgcgtgc ctccacccca gcagcgcccg aggcctccagg aggaaacgga ggcggcacag   300
glgctggccg atatgagggg ggtgggactg ggccccgcgc tgccccgcc gcctccctat   360
gtcattctcg aggagggggg gatccgcgca tacttcacgc tcggtgctga gtgtcccggc   420
tgggattcia ccatcgagtc ggggtatggg gaggcgcccc cgccacgga gaggctggaa   480
gcactcccca ctctgaggc ctcggggggg agcctggaaa tcgattttca ggttgtacag   540
tcgagcagtt ttggtggaga gggggcccta gaaacctgta gcgcagtggg gtgggcgccc   600
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ctcatcatcc agcatatccc aggtttctgg gtcaaagcac tccactcacc agtttctcaa   960
ccaccccaga atttcaattt tgatcaaccg acgtgatgaa gacatttcc gctacttgac  1020
caatctgcag gtcaggccag agagacattt tttagtagga tcgggcacga atctggttct  1080
tggaggtgac gggaggtggg tgggaagggc cgtggtgtgt tggggggggg acagattcca  1140
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ctcaaaccat agcctcccag aggcigacag gatigctgag attatcaaga atgatctgtg  1440
ggttaacccf ctacgtactt acctgagaga aaggggctcc aggataaaga gaaagaagca  1500
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aaaagactag tgtaacacag gatttatgga gccaaaaagg gacctttgag ataatcccag  1620
tgggatatgt tttaacaagt ggaaatcatg cccagaaatg gcttgagggt acacagtcag  1680
gggcagaagt gggactttac ccaccctagc cccattccct ggatccctta tagcctactg  1740

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<211> 1825

<212> DNA

<213> Homo sapiens

<400> 4385

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<211> 1981

<212> DNA

<213> Homo sapiens

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<210> 4387

<211> 2296

<212> DNA

<213> Homo sapiens

<400> 4387

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<210> 4388

<211> 1693

<212> DNA

<213> Homo sapiens

<400> 4388

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<212> DNA

<213> Homo sapiens

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<211> 1520

<212> DNA

<213> Homo sapiens

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<211> 5188

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

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<211> 2012

<212> DNA

<213> Homo sapiens

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<211> 2142

<212> DNA

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<400> 4404

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<211> 2007

<212> DNA

<213> Homo sapiens

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<211> 2931

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 4408

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<211> 3070

<212> DNA

<213> Homo sapiens

<400> 4409

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<211> 1810

<212> DNA

<213> Homo sapiens

<400> 4419

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<211> 2282

<212> DNA

<213> Homo sapiens

<400> 4420

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<211> 2319

<212> DNA

<213> Homo sapiens

<400> 4421

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<212> DNA

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<212> DNA

<213> Homo sapiens

<400> 4423

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<211> 2976

<212> DNA

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 2102

<212> DNA

<213> Homo sapiens

<400> 4442

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<211> 2117

<212> DNA

<213> Homo sapiens

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<211> 1807

<212> DNA

<213> Homo sapiens

<400> 4444

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<212> DNA

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<212> DNA

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<400> 4447

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<212> DNA

<213> Homo sapiens

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<211> 1954

<212> DNA

<213> Homo sapiens

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<212> DNA

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 4463

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<211> 3740

<212> DNA

<213> Homo sapiens

<400> 4464

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<212> DNA

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 4501

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1809

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<212> DNA

<213> Homo sapiens

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<211> 1582

<212> DNA

<213> Homo sapiens

<400> 4503

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 2505

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

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<212> DNA

<213> Homo sapiens

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<211> 2107

<212> DNA

<213> Homo sapiens

<400> 4559

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<212> DNA

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<400> 4561

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<211> 3686

<212> DNA

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 2214

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<212> DNA

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<400> 4583

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<212> DNA

<213> Homo sapiens

<400> 4584

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<211> 1919

<212> DNA

<213> Homo sapiens

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<211> 2184

<212> DNA

<213> Homo sapiens

<400> 4586

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<212> DNA

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<211> 3538

<212> DNA

<213> Homo sapiens

<400> 4588

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

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<400> 4631

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<211> 2108

<212> DNA

<213> Homo sapiens

<400> 4632

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<211> 1986

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 1935

<212> DNA

<213> Homo sapiens

<400> 4637

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<211> 3660

<212> DNA

<213> Homo sapiens

<400> 4665

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<211> 2235

<212> DNA

<213> Homo sapiens

<400> 4666

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<212> DNA

<213> Homo sapiens

<400> 4667

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<212> DNA

<213> Homo sapiens

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<211> 2536

<212> DNA

<213> Homo sapiens

<400> 4669

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<211> 2568

<212> DNA

<213> Homo sapiens

<400> 4671

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<212> DNA

<213> Homo sapiens

<400> 4672

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<212> DNA

<213> Homo sapiens

<400> 4673

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<210> 4682

<211> 3913

<212> DNA

<213> Homo sapiens

<400> 4682

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3913

<210> 4683

<211> 4376

<212> DNA

<213> Homo sapiens

<400> 4683

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<210> 4684

<211> 492

<212> PRT

<213> Homo sapiens

<400> 4684

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Gln Pro Met Leu Phe Gln Glu Ala Thr Ala Phe Glu Asn Met Thr Lys
      35              40              45
Asp Trp Asn Tyr Leu Glu Gly Ser Gln Lys Asp Cys Tyr Arg Asp Thr
      50              55              60
Met Leu Asp Ser Tyr Glu Asn Thr Val Pro Gln Gly Ser Phe Leu Gln
      65              70              75              80
Leu Ser Met Met Pro Gln Arg Ala Gly Asn Asp Pro Pro Gly Val Ser
      85              90              95
Asn Ala Ser Glu Met Glu Met Glu Ile Ser Asn Met Arg Glu Lys Phe
      100             105             110
Leu Met Ser Val Thr Lys Leu Val Glu Ser Lys Ser Tyr Asn Ser Lys
      115             120             125
Val Phe Ser Lys Glu Lys Tyr Phe Gln Thr Ile Lys Glu Val Lys Glu
      130             135             140

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Ala Lys Glu Lys Gly Lys Lys Ser Ser Arg Asp Tyr Arg Arg Ala Ala
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 Lys Tyr Asp Val Ile Ser Val Gln Gly Thr Glu Lys Leu Ile Glu Ala
 165 170 175
 Thr His Gly Glu Arg Asp Arg Ile Arg Tyr Tyr Val His Lys Glu Glu
 180 185 190
 Leu Phe Asp Ile Leu His Asp Thr His Leu Ser Ile Gly His Gly Gly
 195 200 205
 Arg Thr Arg Met Leu Lys Glu Leu Gln Gly Lys Tyr Gly Asn Val Thr
 210 215 220
 Lys Glu Val Ile Val Leu Tyr Leu Thr Leu Cys Lys Gln Cys His Gln
 225 230 235 240
 Lys Asn Pro Val Pro Lys Arg Gly Leu Ala Pro Lys Pro Met Thr Phe
 245 250 255
 Lys Asp Ile Asp Ser Thr Cys Gln Val Glu Ile Leu Asp Met Gln Ser
 260 265 270
 Ser Ala Asp Gly Glu Phe Lys Phe Ile Leu Tyr Tyr Gln Asp His Ser
 275 280 285
 Thr Lys Phe Ile Ile Leu Arg Pro Leu Arg Thr Lys Gln Ala His Glu
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 Val Val Ser Val Leu Leu Asp Ile Phe Thr Ile Leu Gly Thr Pro Ser
 305 310 315 320
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 Glu Leu Asn Glu Leu Trp Pro Asp Leu Lys Ile Val Ser Gly Lys Tyr
 340 345 350
 His Pro Gly Gln Ser Gln Gly Ser Leu Glu Gly Ala Ser Arg Asp Val
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 Lys Asn Met Ile Ser Thr Trp Met Gln Ser Asn His Ser Cys His Trp
 370 375 380
 Ala Lys Gly Leu Arg Phe Met Gln Met Val Arg Asn Gln Ala Phe Asp
 385 390 395 400
 Val Ser Leu Gln Gln Ser Pro Phe Glu Ala Met Phe Gly Tyr Lys Ala
 405 410 415
 Lys Phe Gly Leu Tyr Ser Ser Asn Leu Pro Arg Glu Thr Val Ala Thr
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Leu Gln Thr Glu Glu Glu Leu Glu Ile Ala Glu Glu Gln Leu Glu Asn
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 Ser Leu Trp Ile Arg Gln Glu Glu Arg Ala Glu Ile Gly Ala Asp Arg
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<210> 4685

<211> 287

<212> PRT

<213> Homo sapiens

<400> 4685

Met Asp Arg Pro Asp Glu Gly Pro Pro Ala Lys Thr Arg Arg Leu Ser
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 35 40 45
 Gln Glu Glu Thr Glu Ala Ala Gln Val Leu Ala Asp Met Arg Gly Val
 50 55 60
 Gly Leu Gly Pro Ala Leu Pro Pro Pro Pro Pro Tyr Val Ile Leu Glu
 65 70 75 80
 Glu Gly Gly Ile Arg Ala Tyr Phe Thr Leu Gly Ala Glu Cys Pro Gly
 85 90 95
 Trp Asp Ser Thr Ile Glu Ser Gly Tyr Gly Glu Ala Pro Pro Pro Thr
 100 105 110
 Glu Ser Leu Glu Ala Leu Pro Thr Pro Glu Ala Ser Gly Gly Ser Leu
 115 120 125
 Glu Ile Asp Phe Gln Val Val Gln Ser Ser Ser Phe Gly Gly Glu Gly
 130 135 140
 Ala Leu Glu Thr Cys Ser Ala Val Gly Trp Ala Pro Gln Arg Leu Val
 145 150 155 160

Asp Pro Lys Ser Lys Glu Glu Ala Ile Ile Ile Val Glu Asp Glu Asp
 165 170 175
 Glu Asp Glu Arg Glu Ser Met Arg Ser Ser Arg Arg Arg Arg Arg Arg
 180 185 190
 Arg Arg Arg Lys Gln Arg Lys Val Lys Arg Glu Ser Arg Glu Arg Asn
 195 200 205
 Ala Glu Arg Met Glu Ser Ile Leu Gln Ala Leu Glu Asp Ile Gln Leu
 210 215 220
 Asp Leu Glu Ala Val Asn Ile Lys Ala Gly Lys Ala Phe Leu Arg Leu
 225 230 235 240
 Lys Arg Lys Phe Ile Gln Met Arg Arg Pro Phe Leu Glu Arg Arg Asp
 245 250 255
 Leu Ile Ile Gln His Ile Pro Gly Phe Trp Val Lys Ala Leu His Ser
 260 265 270
 Ser Val Pro Gln Pro Pro Gln Asn Phe Asn Phe Asp Gln Pro Thr
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<210> 4686

<211> 196

<212> PRT

<213> Homo sapiens

<400> 4686

Met Ser Glu Gly Pro Gly Cys Met Gly Ser Glu Gly Gln Leu Cys Pro
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 35 40 45
 Gly Ser Glu Gly Cys Gln Cys Pro Gly Ser Glu Gly Arg Arg Val Leu
 50 55 60
 Arg Phe Glu Gly Trp His Val Leu Gly Ser Glu Gly Gln Arg Val Pro
 65 70 75 80
 Gly Ser Glu Gly Arg Pro Leu Gly Pro Leu Gly Leu Leu Arg Glu Gly

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Ser	Gly	Ala	Leu	Pro	Arg	Pro	Pro	Ser	Leu	Ser	Phe	Leu	Thr	Trp	Phe
	115				120				125						
Leu	Pro	Arg	Ser	Pro	Cys	Ile	Leu	Thr	Pro	Gly	Gly	Gly	Pro	Thr	Ser
	130				135				140						
Asn	Ser	Leu	Ser	Pro	Ala	Gly	Ala	Trp	Ala	Gly	Pro	Arg	Ser	Leu	Leu
145		150						155						160	
Pro	Gln	Leu	Ala	Phe	Arg	Gly	Glu	Thr	Lys	Ala	Gln	Gly	Leu	Phe	Trp
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Phe	Ser	Ala	Gln	Thr	Trp	Gln	Leu	Pro	Gly	Gly	Gly	Arg	Arg	Ala	Pro
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Glu	Val	Gly	Ile												
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<210> 4687

<211> 295

<212> PRT

<213> Homo sapiens

<400> 4687

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Phe	Met	Ile	Pro	Gly	Glu	Lys	Val	Ala	His	Thr	Ser	Leu	Asp	Ala	Leu
	35						40				45				
Val	Thr	Phe	His	Gln	Gln	Lys	Pro	Ile	Glu	Pro	Arg	Arg	Glu	Leu	Leu
	50					55					60				
Thr	Gln	Pro	Cys	Arg	Gln	Lys	Asp	Pro	Ala	Asn	Val	Asp	Tyr	Glu	Asp
65			70						75					80	
Leu	Phe	Leu	Tyr	Ser	Asn	Ala	Val	Ala	Glu	Glu	Ala	Ala	Cys	Pro	Val
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 Lys Glu Arg Lys Pro Ser Ala Glu Met Asn Gly Ile Thr Thr Lys Glu
 115 120 125
 Ala Thr Ser Ser Cys Pro Pro Lys Ser Pro Leu Gly Glu Thr Arg Gln
 130 135 140
 Lys Leu Trp Arg Ser Leu Lys Met Leu Pro Glu Arg Gly Gln Arg Val
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 Arg Gln Gln Leu Lys Ser His Leu Ala Thr Val Asn Leu Ser Ser Leu
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 Gly Ser Gln Asp His Ser Gly Asp Pro Thr Ser Gly Asp Arg Gly Tyr
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 Ala Pro Lys Asp Arg Lys Val Pro Thr Arg Lys Ala Glu Arg Ser Val
 225 230 235 240
 Ser Cys Ile Glu Val Thr Pro Gly Asp Arg Ser Trp His Gln Met Val
 245 250 255
 Val Arg Ala Leu Ser Ser Gln Glu Ser Lys Pro Glu His Gln Gly Leu
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 Pro Phe Ala Pro Gly Tyr Cys
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<210> 4688

<211> 594

<212> PRT

<213> Homo sapiens

<400> 4688

Met Lys Val Thr Leu Ser Ala Leu Asp Thr Ser Glu Ser Ser Phe Thr

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Glu Trp Leu Lys Asn Arg Ile Ile Ala Lys Lys Lys Asp Gly Asp Asn			
35	40	45	
Asn Asp Asp Phe Leu Thr Met Ala Glu Cys Gln Phe Ile Ile Lys His			
50	55	60	
Glu Leu Glu Asn Leu Arg Ala Lys Asp Glu Lys Met Ile Pro Gly Tyr			
65	70	75	80
Pro Gln Ala Lys Leu Tyr Pro Gly Lys Ser Leu Leu Arg Arg Leu Leu			
85	90	95	
Thr Ser Gly Ile Val Ile Gln Val Phe Pro Leu His Asp Ser Glu Ala			
100	105	110	
Leu Lys Lys Leu Glu Asp Thr Trp Tyr Thr Arg Phe Ala Leu Lys Tyr			
115	120	125	
Gln Pro Ile Asp Ser Ile Arg Gly Tyr Phe Gly Glu Thr Ile Ala Leu			
130	135	140	
Tyr Phe Gly Phe Leu Glu Tyr Phe Thr Phe Ala Leu Ile Pro Met Ala			
145	150	155	160
Val Ile Gly Leu Pro Tyr Tyr Leu Phe Val Trp Glu Asp Tyr Asp Lys			
165	170	175	
Tyr Val Ile Phe Ala Ser Phe Asn Leu Ile Trp Ser Thr Val Ile Leu			
180	185	190	
Glu Leu Trp Lys Arg Gly Cys Ala Asn Met Thr Tyr Arg Trp Gly Thr			
195	200	205	
Leu Leu Met Lys Arg Lys Phe Glu Glu Pro Arg Pro Gly Phe His Gly			
210	215	220	
Val Leu Gly Ile Asn Ser Ile Thr Gly Lys Glu Glu Pro Leu Tyr Pro			
225	230	235	240
Ser Tyr Lys Arg Gln Leu Arg Ile Tyr Leu Val Ser Leu Pro Phe Val			
245	250	255	
Cys Leu Cys Leu Tyr Phe Ser Leu Tyr Val Met Met Ile Tyr Phe Asp			
260	265	270	
Met Glu Val Trp Ala Leu Gly Leu His Glu Asn Ser Gly Ser Glu Trp			
275	280	285	
Thr Ser Val Leu Leu Tyr Val Pro Ser Ile Ile Tyr Ala Ile Val Ile			

290	295	300
Glu Ile Met Asn Arg Leu Tyr Arg Tyr Ala Ala Glu Phe Leu Thr Ser		
305	310	315
Trp Glu Asn His Arg Leu Glu Ser Ala Tyr Gln Asn His Leu Ile Leu		
	325	330
		335
Lys Val Leu Val Phe Asn Phe Leu Asn Cys Phe Ala Ser Leu Phe Tyr		
	340	345
		350
Ile Ala Phe Val Leu Lys Asp Met Lys Leu Leu Arg Gln Ser Leu Ala		
	355	360
		365
Thr Leu Leu Ile Thr Ser Gln Ile Leu Asn Gln Ile Met Glu Ser Phe		
	370	375
		380
Leu Pro Tyr Trp Leu Gln Arg Lys His Gly Val Gln Val Lys Arg Lys		
385	390	395
		400
Val Gln Ala Leu Lys Ala Asp Ile Asp Ala Thr Leu Tyr Glu Gln Val		
	405	410
		415
Ile Leu Glu Lys Glu Met Gly Thr Tyr Leu Gly Thr Phe Asp Asp Tyr		
	420	425
		430
Leu Glu Leu Phe Leu Gln Phe Gly Tyr Val Ser Leu Phe Ser Cys Val		
	435	440
		445
Tyr Pro Leu Ala Ala Ala Phe Ala Val Leu Asn Asn Phe Thr Glu Val		
	450	455
		460
Asn Ser Asp Ala Leu Lys Met Cys Arg Val Phe Lys Arg Pro Phe Ser		
465	470	475
		480
Glu Pro Ser Ala Asn Ile Gly Val Trp Gln Leu Ala Phe Glu Thr Met		
	485	490
		495
Ser Val Ile Ser Val Val Thr Asn Cys Ala Leu Ile Gly Met Ser Pro		
	500	505
		510
Gln Val Asn Ala Val Phe Pro Glu Ser Lys Ala Asp Leu Ile Leu Ile		
	515	520
		525
Val Val Ala Val Glu His Ala Leu Leu Ala Leu Lys Phe Ile Leu Ala		
	530	535
		540
Phe Ala Ile Pro Asp Lys Pro Arg His Ile Gln Met Lys Leu Ala Arg		
545	550	555
		560
Leu Glu Phe Glu Ser Leu Glu Ala Leu Lys Gln Gln Gln Met Lys Leu		
	565	570
		575
Val Thr Glu Asn Leu Lys Glu Glu Pro Met Glu Ser Gly Lys Glu Lys		

580 585 590
Ala Thr

<210> 4689

<211> 120

<212> PRT

<213> Homo sapiens

<400> 4689

Met Phe Leu Ala Pro Leu Leu His Ser Leu Val Leu Pro Gly Leu Phe
1 5 10 15
Leu Ala Pro Pro Leu His Ser Ala Val Leu Pro Gly Met Phe Leu Ala
20 25 30
Pro Pro Leu His Ser Pro Val Leu Pro Gly Met Phe Leu Ala Pro Pro
35 40 45
Leu His Ser Pro Val Leu Ile Ser His Phe Ser Lys Val Gly Phe Arg
50 55 60
Gly Arg Arg Asp Glu Arg Lys Asp Thr Ala Ser His Gly Gly Tyr Gly
65 70 75 80
Ser His Leu Val Met Gly Leu Ser Gly Cys Asp Lys Tyr Thr Lys Pro
85 90 95
His Phe Phe Ser Trp Gly Ala Phe Gly Glu Leu Leu Trp Arg Pro Ser
100 105 110
His Arg Met Leu Glu Asp Gly Phe
115 120

<210> 4690

<211> 461

<212> PRT

<213> Homo sapiens

<400> 4690

Met Glu Arg Glu Gly Ile Trp His Ser Thr Leu Gly Glu Thr Trp Glu

1	5	10	15
Pro Asn Asn Trp	Leu Glu Gly Gln	Gln Asp Ser His	Leu Ser Gln Val
20	25	30	
Gly Val Thr His	Lys Glu Thr Phe	Thr Glu Met Arg	Val Cys Gly Gly
35	40	45	
Asn Glu Phe Glu	Arg Cys Ser Ser	Gln Asp Ser Ile	Leu Asp Thr Gln
50	55	60	
Gln Ser Ile Pro	Met Val Lys Arg	Pro His Asn Cys	Asn Ser His Gly
65	70	75	80
Glu Asp Ala Thr	Gln Asn Ser Glu	Leu Ile Lys Thr	Gln Arg Met Phe
85	90	95	
Val Gly Lys Lys	Ile Tyr Glu Cys	Asn Gln Cys Ser	Lys Thr Phe Ser
100	105	110	
Gln Ser Ser Ser	Leu Leu Lys His	Gln Arg Ile His	Thr Gly Glu Lys
115	120	125	
Pro Tyr Lys Cys	Asn Val Cys Gly	Lys His Phe Ile	Glu Arg Ser Ser
130	135	140	
Leu Thr Val His	Gln Arg Ile His	Thr Gly Glu Lys	Pro Tyr Lys Cys
145	150	155	160
Asn Glu Cys Gly	Lys Ala Phe Ser	Gln Ser Met Asn	Leu Thr Val His
165	170	175	
Gln Arg Thr His	Thr Gly Glu Lys	Pro Tyr Gln Cys	Lys Glu Cys Gly
180	185	190	
Lys Ala Phe His	Lys Asn Ser Ser	Leu Ile Gln His	Glu Arg Ile His
195	200	205	
Thr Gly Glu Lys	Pro Tyr Lys Cys	Asn Glu Cys Gly	Lys Ala Phe Thr
210	215	220	
Gln Ser Met Asn	Leu Thr Val His	Gln Arg Thr His	Thr Gly Glu Lys
225	230	235	240
Pro Tyr Glu Cys	Asn Glu Cys Gly	Lys Ala Phe Ser	Gln Ser Met His
245	250	255	
Leu Ile Val His	Gln Arg Ser His	Thr Gly Glu Lys	Pro Tyr Glu Cys
260	265	270	
Ser Gln Cys Gly	Lys Ala Phe Ser	Lys Ser Ser Thr	Leu Thr Leu His
275	280	285	
Gln Arg Asn His	Thr Gly Glu Lys	Pro Tyr Lys Cys	Asn Lys Cys Gly

290	295	300	
Lys Ser Phe Ser Gln Ser Thr Tyr Leu Ile Glu His Gln Arg Leu His			
305	310	315	320
Ser Gly Val Lys Pro Phe Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser			
	325	330	335
Lys Asn Ser Ser Leu Thr Gln His Arg Arg Ile His Thr Gly Glu Lys			
	340	345	350
Pro Tyr Glu Cys Met Val Cys Gly Lys His Phe Thr Gly Arg Ser Ser			
	355	360	365
Leu Thr Val His Gln Val Ile His Thr Gly Glu Lys Pro Tyr Glu Cys			
370	375	380	
Asn Glu Cys Gly Lys Ala Phe Ser Gln Ser Ala Tyr Leu Ile Glu His			
385	390	395	400
Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asp Gln Cys Gly			
	405	410	415
Lys Ala Phe Ile Lys Asn Ser Ser Leu Thr Val His Gln Arg Thr His			
	420	425	430
Thr Gly Glu Lys Pro Tyr Gln Cys Asn Glu Cys Gly Lys Ala Phe Ser			
	435	440	445
Arg Ser Thr Asn Leu Thr Arg His Gln Arg Thr His Thr			
450	455	460	

<210> 4691

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4691

Met Thr Ile Ala Thr Pro Phe Val Cys Leu Ile Phe Ala His Ser Gln			
1	5	10	15
Val Phe Thr Asp Phe Ile Pro Tyr Ser Arg His Leu Gln Met Pro Thr			
	20	25	30
Ser Tyr Pro Cys Ser Lys Thr His Phe Lys Cys Pro Leu Leu Trp Glu			
	35	40	45
Met Pro Val Val Pro Leu Asp Thr Asn His Leu Ser Ser Leu Glu Pro			

50 55 60
 Ile Thr His Ala Pro Thr Pro Ile Ser Asn Ala Tyr Ser Ser Arg Lys
 65 70 75 80
 Cys Pro Ser Thr His Gly Gln Lys Ser Ser Leu Leu Leu Thr Ala Asn
 85 90 95
 Thr Ala Ala His Gln Ala Trp Ala Leu Ser His Val Leu Ser Ile Thr
 100 105 110
 Leu Thr Asp Leu Trp Pro Ile Tyr Pro His
 115 120

<210> 4692

<211> 123

<212> PRT

<213> Homo sapiens

<400> 4692

Met Lys Gly Pro Cys Pro His Leu Pro Pro Pro Leu Ser Ser Cys Ile
 1 5 10 15
 Met Asn Glu Thr Ala Ala Ser Leu Leu Pro Glu Val Leu His Phe Arg
 20 25 30
 Leu Gly Cys Asn Gly Ser Ile Ser Ala Gln Cys Asn Leu Cys Phe Pro
 35 40 45
 Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln Ala Ala Val Asn Thr
 50 55 60
 Gly Trp Ser Ala Val Val Leu Cys Leu Glu Phe Val Pro Ala Val Gly
 65 70 75 80
 Phe Val Val Leu Leu Thr Ser Arg Met Lys Pro Arg Thr Phe Thr Arg
 85 90 95
 Asn Ile Thr Leu Tyr Gly Cys Thr Thr Val Cys Leu Ser Ile Leu Gln
 100 105 110
 Val Lys Asp Met Trp Val Val Pro Ser Ala Gly
 115 120

<210> 4693

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4693

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Met Asp Leu His His Ser Val Gln Pro Glu Ser Leu Leu Leu Ser Thr
  1              5              10              15
Ala Ser Phe Ser Phe Ser Leu Ile Ile Pro Phe Asn Ser Asn Lys Met
      20              25              30
Thr Trp Pro Ala His Glu Asn Thr Glu Met Arg Pro His Leu Val Ile
      35              40              45
Ser Gly Val Leu Arg Gly Thr Leu Val Val Val Leu Gly Ala Ala Val
      50              55              60
Leu Ser Val Lys Asn Phe Gln Glu Phe Leu Ile Ser Cys Phe His Gln
      65              70              75              80
Asp Ser His Asn Leu Leu Leu Leu Pro Leu Ser Ser Gly Phe Val Pro
      85              90              95
Glu His Ile Ile Arg Lys Ala Ala Ile Ile Thr Ala Tyr Leu Pro Pro
      100             105             110
Ala Pro Leu His Lys His Pro Pro Ser Pro His Cys Ala Lys Gln
      115             120             125

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<210> 4694

<211> 194

<212> PRT

<213> Homo sapiens

<400> 4694

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Met Asp Arg Pro Ser Leu Val Arg Ser Arg Lys Gln Ser Pro Arg Leu
  1              5              10              15
Ser Ala Ser Ser Gly Asn Phe Ile Pro Pro Tyr His Pro Ser Ser Leu
      20              25              30
Gly Lys Val Glu Arg Thr Asn Gly Leu Leu Lys Thr His Leu Thr Lys
      35              40              45
Leu Ser Leu Gln Leu Lys Lys Asp Trp Thr Ala Leu Leu Pro Phe Ala

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50	55	60	
Leu Leu Arg Ile Arg Ala Tyr Pro Gln Glu Ala Thr Gly Tyr Ser Pro			
65	70	75	80
Phe Glu Leu Ser Tyr Gly Cys Thr Phe Leu Leu Gly Pro Asn Leu Leu			
85	90	95	
Thr Asp Asn Thr Tyr Ala Asp Met Gln Gln Lys Lys Gln Leu Val Phe			
100	105	110	
Pro His Leu Ser Leu Thr Ala Ser Phe Leu Pro Ser His Leu Ser Leu			
115	120	125	
Pro Pro Ile Leu Pro Leu Lys Leu Leu Pro Ile Asn Pro Phe Leu Leu			
130	135	140	
Met Lys Leu Leu Pro Ile Asn Pro Phe Leu Leu Lys Ala Asn Gly Ser			
145	150	155	160
Trp Ile Lys Glu Asn Ser Ser Phe Leu Pro His Arg Leu Ile Leu Ser			
165	170	175	
Tyr His Pro Phe Arg Thr Ser Phe Met Trp Val Thr Ser Gln Trp Pro			
180	185	190	
Ile Ser			

<210> 4695

<211> 237

<212> PRT

<213> Homo sapiens

<400> 4695

Met Ser Cys Arg His Ser Phe Pro Leu Leu Leu Pro Cys Ser Leu His	
1	5 10 15
Ser His Ala Phe Leu Ser Ser Cys His Gly Asp Leu Cys Pro Leu Thr	
20	25 30
Ser His Thr Ala Cys Phe Leu Ala Cys Val Pro Pro Gln Ala Gly Gly	
35	40 45
His Phe Gln Ser Ser Phe Thr Pro Cys Val Arg Val Ile Asn Gln Ile	
50	55 60
Trp Ala Pro Val Leu His Pro Leu Cys His Asn Ser Pro Cys Pro Pro	

65 70 75 80
 Asn Leu Pro Gly Thr Arg Phe Gly Ala Met Leu Asp Met Leu Thr Asp
 85 90 95
 Arg Cys Ser Thr Met Cys Leu Leu Val Asn Leu Ala Leu Leu Tyr Pro
 100 105 110
 Gly Ala Thr Leu Phe Phe Gln Ile Ser Met Ser Leu Asp Val Ala Ser
 115 120 125
 His Trp Leu His Leu His Ser Ser Val Val Arg Gly Ser Glu Ser His
 130 135 140
 Lys Met Ile Asp Leu Ser Gly Asn Pro Val Leu Arg Ile Tyr Tyr Thr
 145 150 155 160
 Ser Arg Pro Ala Leu Phe Thr Leu Cys Ala Gly Asn Glu Leu Phe Tyr
 165 170 175
 Cys Leu Leu Tyr Leu Phe His Phe Ser Glu Gly Pro Leu Val Gly Ser
 180 185 190
 Val Gly Leu Phe Arg Met Gly Leu Trp Val Thr Ala Pro Ile Ala Leu
 195 200 205
 Leu Lys Ser Leu Ile Ser Val Ile His Leu Ile Thr Ala Ala Arg Asn
 210 215 220
 Met Ala Ala Leu Asp Ala Ala Asp Arg Ala Lys Lys Lys
 225 230 235

<210> 4696

<211> 111

<212> PRT

<213> Homo sapiens

<400> 4696

Met Gln Gln Thr Phe Leu Asp Asp Ser Pro His Pro Pro Ser Cys Gln
 1 5 10 15
 Ala Ser Ala Pro Leu His Phe Ser Phe Ser Glu Trp Ser Leu Arg Arg
 20 25 30
 Leu Pro Asp Leu Leu Leu Pro Gly Pro Ser Gln Ala Tyr Pro Phe Leu
 35 40 45
 Ser Ser Leu Pro Ser Phe Thr Pro Ser Leu Ser Met Glu Pro His Ser

50 55 60
 Gly Gln Asp His Leu Leu Trp Pro Ser Glu Gly Phe Arg Thr Ala Gly
 65 70 75 80
 Gly Cys Ser Pro Arg Pro Leu Glu Trp Phe Val Ile Phe Leu Cys Leu
 85 90 95
 Val Pro Thr Cys Leu Ser Ser Leu Leu Pro Pro His Ala Ser Ser
 100 105 110

<210> 4697

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4697

Met Asn Glu Lys Lys Lys Met Leu Lys Val Ala Arg Glu Lys Gly Gln
 1 5 10 15
 Val Thr Tyr Lys Gly Lys Pro Ile Arg Leu Met Val Gly Leu Leu Ala
 20 25 30
 Asp Thr Leu Gln Ala Ile Arg Asp Leu Gly Pro Met Phe Asn Ile Ser
 35 40 45
 Phe Leu Phe Phe Ser Phe Leu Phe Phe Phe Leu Asp Arg Val Ser Leu
 50 55 60
 Cys His Gln Ala Gly Val Gln Trp His Asp Leu Gly Ser Leu Gln Pro
 65 70 75 80
 Pro Pro Pro Arg Phe Lys Gln Phe Ser Cys Leu Ser Leu Pro Ser Ser
 85 90 95
 Trp Asp Tyr Arg Arg Ala Pro Ser His Leu Ala Asn Phe Cys Ile Phe
 100 105 110
 Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Ser Pro
 115 120 125
 Asp Phe Met Ile
 130

<210> 4698

<211> 665

<212> PRT

<213> Homo sapiens

<400> 4698

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Met Met Lys Thr Phe Phe Ser Thr Gly Gln Gly Asp Thr Glu Ala Phe
  1             5             10             15
His Thr Gly Thr Leu Gln Arg Gln Ala Ser His His Ile Gly Asp Phe
             20             25             30
Cys Phe Gln Lys Ile Glu Lys Asp Ile His Gly Phe Gln Phe Gln Trp
             35             40             45
Lys Glu Asp Glu Thr Asn Asp His Ala Ala Pro Met Thr Glu Ile Lys
             50             55             60
Glu Leu Thr Gly Ser Thr Gly Gln His Asp Gln Arg His Ala Gly Asn
             65             70             75             80
Lys His Ile Lys Asp Gln Leu Gly Leu Ser Phe His Ser His Leu Pro
             85             90             95
Glu Leu His Ile Phe Gln Pro Glu Gly Lys Ile Gly Asn Gln Val Glu
             100            105            110
Lys Ser Ile Asn Asn Ala Ser Ser Val Ser Thr Ser Gln Arg Ile Cys
             115            120            125
Cys Arg Pro Lys Thr His Ile Ser Asn Lys Tyr Gly Asn Asn Ser Leu
             130            135            140
His Ser Ser Leu Leu Thr Gln Lys Arg Asn Val His Met Arg Glu Lys
             145            150            155            160
Ser Phe Gln Cys Ile Glu Ser Gly Lys Ser Phe Asn Cys Ser Ser Leu

             165             170             175
Leu Lys Lys His Gln Ile Thr His Leu Glu Glu Lys Gln Cys Lys Cys
             180             185             190
Asp Val Tyr Gly Lys Val Phe Asn Gln Lys Arg Tyr Leu Ala Cys His
             195             200             205
Arg Arg Ser His Ile Asp Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
             210             215             220
Lys Ile Phe Gly His Asn Thr Ser Leu Phe Leu His Lys Ala Leu His

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225	230	235	240
Thr Ala Asp Lys Pro Tyr Glu Cys Glu Glu Cys Asp Lys Val Phe Ser			
245	250	255	
Arg Lys Ser His Leu Glu Thr His Lys Ile Ile Tyr Thr Gly Gly Lys			
260	265	270	
Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Thr Cys Asn Ser Tyr			
275	280	285	
Leu Ala Lys His Thr Ile Ile His Thr Gly Glu Lys Pro Tyr Lys Cys			
290	295	300	
Asn Glu Cys Gly Lys Val Phe Asn Arg Leu Ser Thr Leu Ala Arg His			
305	310	315	320
Arg Arg Leu His Thr Gly Glu Lys Pro Tyr Glu Cys Glu Glu Cys Glu			
325	330	335	
Lys Val Phe Ser Arg Lys Ser His Leu Glu Arg His Lys Arg Ile His			
340	345	350	
Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala			
355	360	365	
Tyr Asn Ser Tyr Leu Ala Lys His Ser Ile Ile His Thr Gly Glu Lys			
370	375	380	
Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Asn Gln Gln Ser Thr			
385	390	395	400
Leu Ala Arg His His Arg Leu His Thr Ala Glu Gln Pro Tyr Lys Cys			
405	410	415	
Glu Glu Cys Asp Lys Val Phe Arg Cys Lys Ser His Leu Glu Arg His			
420	425	430	
Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp			
435	440	445	
Lys Ala Phe Arg Ser Asp Ser Cys Leu Thr Glu His Gln Arg Val His			
450	455	460	
Thr Gly Glu Lys Pro Tyr Thr Cys Asn Glu Cys Gly Lys Val Phe Ser			
465	470	475	480
Thr Lys Ala Asn Leu Ala Cys His His Lys Leu His Thr Ala Glu Lys			
485	490	495	
Pro Tyr Lys Cys Glu Glu Cys Glu Lys Val Phe Ser Arg Lys Ser His			
500	505	510	
Met Glu Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys			

515	520	525
Lys Val Cys Asp Lys Ala Phe Arg Arg Asp Ser His Leu Ala Gln His		
530	535	540
Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly		
545	550	555
Lys Thr Phe Arg Gln Thr Ser Ser Leu Ile Ile His Arg Arg Leu His		
565	570	575
Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser		
580	585	590
Gln Met Ser Ser Leu Val Tyr His His Arg Leu His Ser Gly Glu Lys		
595	600	605
Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Asn Gln Gln Ala His		
610	615	620
Leu Ala Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys		
625	630	635
Asn Glu Cys Gly Lys Thr Phe Ser Gln Met Ser Asn Leu Val Tyr His		
645	650	655
His Arg Leu His Ser Gly Glu Lys Pro		
660	665	

<210> 4699

<211> 986

<212> PRT

<213> Homo sapiens

<400> 4699

Met Pro Arg Ala Thr Trp Ala Asn Ser Lys Glu Arg Ser Trp Ala Glu
1 5 10 15
Ser Glu Arg Gly Pro Arg Asp Thr Gly Asn Gly Gly Ser Lys Ala Glu
20 25 30
Arg His Ile Gln Glu Ile Glu Thr Gly Arg Gly Gly Asp Arg Ala Lys
35 40 45
Ala His Arg Arg Gln Arg Met Arg Leu Arg Gly Thr Glu Arg Ala Ser
50 55 60
Leu Gly Pro Gly Arg Arg Leu Gly Asp Ser Arg Gly Thr Asp Met Pro

65	70	75	80
Gly Ala Arg Ala Gln Gly Leu Ala Ala Ala Met Thr Glu Glu Ser Glu			
85	90	95	
Glu Thr Val Leu Tyr Ile Glu His Arg Tyr Val Cys Ser Glu Cys Asn			
100	105	110	
Gln Leu Tyr Gly Ser Leu Glu Glu Val Leu Met His Gln Asn Ser His			
115	120	125	
Val Pro Gln Gln His Phe Glu Leu Val Gly Val Ala Asp Pro Gly Val			
130	135	140	
Thr Val Ala Thr Asp Thr Ala Ser Gly Thr Gly Leu Tyr Gln Thr Leu			
145	150	155	160
Val Gln Glu Ser Gln Tyr Gln Cys Leu Glu Cys Gly Gln Leu Leu Met			
165	170	175	
Ser Pro Ser Gln Leu Leu Glu His Gln Glu Leu His Leu Lys Met Met			
180	185	190	
Ala Pro Gln Glu Ala Val Pro Ala Glu Pro Ser Pro Lys Ala Pro Pro			
195	200	205	
Leu Ser Ser Ser Thr Ile His Tyr Glu Cys Val Asp Cys Lys Ala Leu			
210	215	220	
Phe Ala Ser Gln Glu Leu Trp Leu Asn His Arg Gln Thr His Leu Arg			
225	230	235	240
Ala Thr Pro Thr Lys Ala Pro Ala Pro Val Val Leu Gly Ser Pro Val			
245	250	255	
Val Leu Gly Pro Pro Val Gly Gln Ala Arg Val Ala Val Glu His Ser			
260	265	270	
Tyr Arg Lys Ala Glu Glu Gly Gly Glu Gly Ala Thr Val Pro Ser Ala			
275	280	285	
Ala Ala Thr Thr Thr Glu Val Val Thr Glu Val Glu Leu Leu Leu Tyr			
290	295	300	
Lys Cys Ser Glu Cys Ser Gln Leu Phe Gln Leu Pro Ala Asp Phe Leu			
305	310	315	320
Glu His Gln Ala Thr His Phe Pro Ala Pro Val Pro Glu Ser Gln Glu			
325	330	335	
Pro Ala Leu Gln Gln Glu Val Gln Ala Ser Ser Pro Ala Glu Val Pro			
340	345	350	
Val Ser Gln Pro Asp Pro Leu Pro Ala Ser Asp His Ser Tyr Glu Leu			

355	360	365
Arg Asn Gly Glu Ala Ile Gly Arg Asp Arg Arg Gly Arg Arg Ala Arg		
370	375	380
Arg Asn Asn Ser Gly Glu Ala Gly Gly Ala Ala Thr Gln Glu Leu Phe		
385	390	395
Cys Ser Ala Cys Asp Gln Leu Phe Leu Ser Pro His Gln Leu Gln Gln		
405	410	415
His Leu Arg Ser His Arg Glu Gly Val Phe Lys Cys Pro Leu Cys Ser		
420	425	430
Arg Val Phe Pro Ser Pro Ser Ser Leu Asp Gln His Leu Gly Asp His		
435	440	445
Ser Ser Glu Ser His Phe Leu Cys Val Asp Cys Gly Leu Ala Phe Gly		
450	455	460
Thr Glu Ala Leu Leu Leu Ala His Arg Arg Ala His Thr Pro Asn Pro		
465	470	475
Leu His Ser Cys Pro Cys Gly Lys Thr Phe Val Asn Leu Thr Lys Phe		
485	490	495
Leu Tyr His Arg Arg Thr His Gly Val Gly Gly Val Pro Leu Pro Thr		
500	505	510
Thr Pro Val Pro Pro Glu Glu Pro Val Ile Gly Phe Pro Glu Pro Ala		
515	520	525
Pro Ala Glu Thr Gly Glu Pro Glu Ala Pro Glu Pro Pro Val Ser Glu		
530	535	540
Glu Thr Ser Ala Gly Pro Ala Ala Pro Gly Thr Tyr Arg Cys Leu Leu		
545	550	555
Cys Ser Arg Glu Phe Gly Lys Ala Leu Gln Leu Thr Arg His Gln Arg		
565	570	575
Phe Val His Arg Leu Glu Arg Arg His Lys Cys Ser Ile Cys Gly Lys		
580	585	590
Met Phe Lys Lys Lys Ser His Val Arg Asn His Leu Arg Thr His Thr		
595	600	605
Gly Glu Arg Pro Phe Pro Cys Pro Asp Cys Ser Lys Pro Phe Asn Ser		
610	615	620
Pro Ala Asn Leu Ala Arg His Arg Leu Thr His Thr Gly Glu Arg Pro		
625	630	635
Tyr Arg Cys Gly Asp Cys Gly Lys Ala Phe Thr Gln Ser Ser Thr Leu		

645	650	655
Arg Gln His Arg Leu Val His Ala Gln His Phe Pro Tyr Arg Cys Gln		
660	665	670
Glu Cys Gly Val Arg Phe His Arg Pro Tyr Arg Leu Leu Met His Arg		
675	680	685
Tyr His His Thr Gly Glu Tyr Pro Tyr Lys Cys Arg Glu Cys Pro Arg		
690	695	700
Ser Phe Leu Leu Arg Arg Leu Leu Glu Val His Gln Leu Val Val His		
705	710	715
Ala Gly Arg Gln Pro His Arg Cys Pro Ser Cys Gly Ala Ala Phe Pro		
725	730	735
Ser Ser Leu Arg Leu Arg Glu His Arg Cys Ala Ala Ala Ala Ala Gln		
740	745	750
Ala Pro Arg Arg Phe Glu Cys Gly Thr Cys Gly Lys Lys Val Gly Ser		
755	760	765
Ala Ala Arg Leu Gln Ala His Glu Ala Ala His Ala Ala Ala Gly Pro		
770	775	780
Gly Glu Val Leu Ala Lys Glu Pro Pro Ala Pro Arg Ala Pro Arg Ala		
785	790	795
Thr Arg Ala Pro Val Ala Ser Pro Ala Ala Leu Gly Ser Thr Ala Thr		
805	810	815
Ala Ser Pro Ala Ala Pro Ala Arg Arg Arg Gly Leu Glu Cys Ser Glu		
820	825	830
Cys Lys Lys Leu Phe Ser Thr Glu Thr Ser Leu Gln Val His Arg Arg		
835	840	845
Ile His Thr Gly Glu Arg Pro Tyr Pro Cys Pro Asp Cys Gly Lys Ala		
850	855	860
Phe Arg Gln Ser Thr His Leu Lys Asp His Arg Arg Leu His Thr Gly		
865	870	875
Glu Arg Pro Phe Ala Cys Glu Val Cys Gly Lys Ala Phe Ala Ile Ser		
885	890	895
Met Arg Leu Ala Glu His Arg Arg Ile His Thr Gly Glu Arg Pro Tyr		
900	905	910
Ser Cys Pro Asp Cys Gly Lys Ser Tyr Arg Ser Phe Ser Asn Leu Trp		
915	920	925
Lys His Arg Lys Thr His Gln Gln Gln His Gln Ala Ala Val Arg Gln		

930	935	940	
Gln Leu Ala Glu Ala Glu Ala Ala Val Gly Leu Ala Val Met Glu Thr			
945	950	955	960
Ala Val Glu Ala Leu Pro Leu Val Glu Ala Ile Glu Ile Tyr Pro Leu			
	965	970	975
Ala Glu Ala Glu Gly Val Gln Ile Ser Gly			
	980	985	

<210> 4700

<211> 441

<212> PRT

<213> Homo sapiens

<400> 4700

Met Glu Tyr Asp Glu Lys Leu Ala Arg Phe Arg Gln Ala His Leu Asn			
1	5	10	15
Pro Phe Asn Lys Gln Ser Gly Pro Arg Gln His Glu Gln Gly Pro Gly			
	20	25	30
Glu Glu Val Pro Asp Val Thr Pro Glu Glu Ala Leu Pro Glu Leu Pro			
	35	40	45
Pro Gly Glu Pro Glu Phe Arg Cys Pro Glu Arg Val Met Asp Leu Gly			
	50	55	60
Leu Ser Glu Asp His Phe Ser Arg Pro Val Leu Arg Gln Ala Ile Glu			
	65	70	75
Glu Cys Lys Gln Val Ile Leu Glu Leu Pro Glu Gln Ser Glu Lys Gln			
	85	90	95
Lys Asp Ala Val Val Arg Leu Ile His Leu Arg Leu Lys Leu Gln Glu			
	100	105	110
Leu Lys Asp Pro Asn Glu Asp Glu Pro Asn Ile Arg Val Leu Leu Glu			
	115	120	125
His Arg Phe Tyr Lys Glu Lys Ser Lys Ser Val Lys Gln Thr Cys Asp			
	130	135	140
Lys Cys Asn Thr Ile Ile Trp Gly Leu Ile Gln Thr Trp Tyr Thr Cys			
	145	150	155
Thr Gly Cys Tyr Tyr Arg Cys His Ser Lys Cys Leu Asn Leu Ile Ser			

	165		170		175
Lys Pro Cys Val Ser Ser Lys Val Ser His Gln Ala Glu Tyr Glu Leu					
	180		185		190
Asn Ile Cys Pro Glu Thr Gly Leu Asp Ser Gln Asp Tyr Arg Cys Ala					
	195		200		205
Glu Cys Arg Val Pro Ile Ser Leu Arg Gly Val Pro Ser Glu Ala Arg					
	210		215		220
Gln Cys Asp Tyr Thr Gly Gln Tyr Tyr Cys Ser His Cys His Trp Asn					
	225		230		235
Asp Leu Ala Val Ile Pro Ala Arg Val Val His Asn Trp Asp Phe Glu					
	245		250		255
Pro Arg Lys Val Ser Arg Cys Ser Met Arg Tyr Leu Ala Leu Met Val					
	260		265		270
Ser Arg Pro Val Leu Arg Leu Arg Glu Ile Asn Pro Leu Leu Phe Ser					
	275		280		285
Tyr Val Glu Glu Leu Val Glu Ile Arg Lys Leu Arg Gln Asp Ile Leu					
	290		295		300
Leu Met Lys Pro Tyr Phe Ile Thr Cys Arg Glu Ala Met Glu Ala Arg					
305		310		315	320
Leu Leu Leu Gln Leu Gln Asp Arg Gln His Phe Val Glu Asn Asp Glu					
	325		330		335
Met Tyr Ser Val Gln Asp Leu Leu Asp Val His Ala Gly Arg Leu Gly					
	340		345		350
Cys Ser Leu Thr Glu Ile His Thr Leu Phe Ala Lys His Ile Lys Leu					
	355		360		365
Asp Cys Glu Arg Cys Gln Ala Lys Gly Phe Val Cys Glu Leu Cys Arg					
	370		375		380
Glu Gly Asp Val Leu Phe Pro Phe Asp Ser His Thr Ser Val Cys Ala					
385		390		395	400
Asp Cys Ser Ala Val Phe His Arg Asp Cys Tyr Tyr Asp Asn Ser Thr					
	405		410		415
Thr Cys Pro Lys Cys Ala Arg Leu Ser Leu Arg Lys Gln Ser Leu Phe					
	420		425		430
Gln Glu Pro Gly Pro Asp Val Glu Ala					
	435		440		

<210> 4701

<211> 1389

<212> PRT

<213> Homo sapiens

<400> 4701

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Met Lys Gln Leu Gln Pro Gln Pro Pro Lys Met Gly Asp Phe Tyr
  1             5             10             15
Asp Pro Glu His Pro Thr Pro Glu Glu Glu Glu Asn Glu Ala Lys Ile
      20             25             30
Glu Asn Val Gln Lys Thr Gly Phe Ile Lys Gly Pro Met Phe Lys Gly
      35             40             45
Val Ala Ser Ser Arg Phe Leu Pro Lys Gly Thr Lys Thr Lys Val Asn
      50             55             60
Leu Glu Glu Gln Gly Arg Gln Lys Val Ser Phe Ser Phe Ser Leu Thr
      65             70             75             80
Lys Lys Thr Leu Gln Asn Arg Phe Leu Thr Ala Leu Gly Asn Glu Lys
      85             90             95
Gln Ser Asp Thr Pro Asn Pro Pro Ala Val Pro Leu Gln Val Asp Ser
      100            105            110
Thr Pro Lys Met Lys Met Glu Ile Gly Asp Thr Leu Ser Thr Ala Glu
      115            120            125
Glu Ser Ser Pro Pro Lys Ser Arg Val Glu Leu Gly Lys Ile His Phe
      130            135            140
Lys Lys His Leu Leu His Val Thr Ser Arg Pro Leu Leu Ala Thr Thr
      145            150            155            160

Thr Ala Val Ala Ser Pro Pro Thr His Ala Ala Pro Leu Pro Ala Val
      165            170            175
Ile Ala Glu Ser Thr Thr Val Asp Ser Pro Pro Ser Ser Pro Pro Pro
      180            185            190
Pro Pro Pro Pro Ala Gln Ala Thr Thr Leu Ser Ser Pro Ala Pro Val
      195            200            205
Thr Glu Pro Val Ala Leu Pro His Thr Pro Ile Thr Val Leu Met Ala

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210	215	220
Ala Pro Val Pro Leu Pro Val Asp Val Ala Val Arg Ser Leu Lys Glu		
225	230	235
Pro Pro Ile Ile Ile Val Pro Glu Ser Leu Glu Ala Asp Thr Lys Gln		
245	250	255
Asp Thr Ile Ser Asn Ser Leu Glu Glu His Val Thr Gln Ile Leu Asn		
260	265	270
Glu Gln Ala Asp Ile Ser Ser Lys Lys Glu Asp Ser His Ile Gly Lys		
275	280	285
Asp Glu Glu Ile Pro Asp Ser Ser Lys Ile Ser Leu Ser Cys Lys Lys		
290	295	300
Thr Gly Ser Lys Lys Lys Ser Ser Gln Ser Glu Gly Ile Phe Leu Gly		
305	310	315
Ser Glu Ser Asp Glu Asp Ser Val Arg Thr Ser Ser Ser Gln Arg Ser		
325	330	335
His Asp Leu Lys Phe Ser Ala Ser Ile Glu Lys Glu Arg Asp Phe Lys		
340	345	350
Lys Ser Ser Ala Pro Leu Lys Ser Glu Asp Leu Gly Lys Pro Ser Arg		
355	360	365
Ser Lys Thr Asp Arg Asp Asp Lys Tyr Phe Ser Tyr Ser Lys Leu Glu		
370	375	380
Arg Asp Thr Arg Tyr Val Ser Ser Arg Cys Arg Ser Glu Arg Glu Arg		
385	390	395
Arg Arg Ser Arg Ser His Ser Arg Ser Glu Arg Gly Ser Arg Thr Asn		
405	410	415
Leu Ser Tyr Ser Arg Ser Glu Arg Ser His Tyr Tyr Asp Ser Asp Arg		
420	425	430
Arg Tyr His Arg Ser Ser Pro Tyr Arg Glu Arg Thr Arg Tyr Ser Gln		
435	440	445
Pro Tyr Thr Asp Asn Arg Ala Arg Glu Ser Ser Asp Ser Glu Glu Glu		
450	455	460
Tyr Lys Lys Thr Tyr Ser Arg Arg Thr Ser Ser His Ser Ser Ser Tyr		
465	470	475
Arg Asp Leu Arg Thr Ser Ser Tyr Ser Lys Ser Asp Arg Asp Cys Lys		
485	490	495
Thr Glu Thr Ser Tyr Leu Glu Met Glu Arg Arg Gly Lys Tyr Ser Ser		

500	505	510
Lys Leu Glu Arg Glu Ser Lys Arg Thr Ser Glu Asn Glu Ala Ile Lys		
515	520	525
Arg Cys Cys Ser Pro Pro Asn Glu Leu Gly Phe Arg Arg Gly Ser Ser		
530	535	540
Tyr Ser Lys His Asp Ser Ser Ala Ser Arg Tyr Lys Ser Thr Leu Ser		
545	550	555
Lys Pro Ile Pro Lys Ser Asp Lys Phe Lys Asn Ser Phe Cys Cys Thr		
565	570	575
Glu Leu Asn Glu Glu Ile Lys Gln Ser His Ser Phe Ser Leu Gln Thr		
580	585	590
Pro Cys Ser Lys Gly Ser Glu Leu Arg Met Ile Asn Lys Asn Pro Glu		
595	600	605
Arg Glu Lys Ala Gly Ser Pro Ala Pro Ser Asn Arg Leu Asn Asp Ser		
610	615	620
Pro Thr Leu Lys Lys Leu Asp Glu Leu Pro Ile Phe Lys Ser Glu Phe		
625	630	635
Ile Thr His Asp Ser His Asp Ser Ile Lys Glu Leu Asp Ser Leu Ser		
645	650	655
Lys Val Lys Asn Asp Gln Leu Arg Ser Phe Cys Pro Ile Glu Leu Asn		
660	665	670
Ile Asn Gly Ser Pro Gly Ala Glu Ser Asp Leu Ala Thr Phe Cys Thr		
675	680	685
Ser Lys Thr Asp Ala Val Leu Met Thr Ser Asp Asp Ser Val Thr Gly		
690	695	700
Ser Glu Leu Ser Pro Leu Val Lys Ala Cys Met Leu Ser Ser Asn Gly		
705	710	715
Phe Gln Asn Ile Ser Arg Cys Lys Glu Lys Asp Leu Asp Asp Thr Cys		
725	730	735
Met Leu His Lys Lys Ser Glu Ser Pro Phe Arg Glu Thr Glu Pro Leu		
740	745	750
Val Ser Pro His Gln Asp Lys Leu Met Ser Met Pro Val Met Thr Val		
755	760	765
Asp Tyr Ser Lys Thr Val Val Lys Glu Pro Val Asp Thr Arg Val Ser		
770	775	780
Cys Cys Lys Thr Lys Asp Ser Asp Ile Tyr Cys Thr Leu Asn Asp Ser		

785	790	795	800
Asn Pro Ser Leu Cys Asn Ser Glu Ala Glu Asn Ile Glu Pro Ser Val			
805	810	815	
Met Lys Ile Ser Ser Asn Ser Phe Met Asn Val His Leu Glu Ser Lys			
820	825	830	
Pro Val Ile Cys Asp Ser Arg Asn Leu Thr Asp His Ser Lys Phe Ala			
835	840	845	
Cys Glu Glu Tyr Lys Gln Ser Ile Gly Ser Thr Ser Ser Ala Ser Val			
850	855	860	
Asn His Phe Asp Asp Leu Tyr Gln Pro Ile Gly Ser Ser Gly Ile Ala			
865	870	875	880
Ser Ser Leu Gln Ser Leu Pro Pro Gly Ile Lys Val Asp Ser Leu Thr			
885	890	895	
Leu Leu Lys Cys Gly Glu Asn Thr Ser Pro Val Leu Asp Ala Val Leu			
900	905	910	
Lys Ser Lys Lys Ser Ser Glu Phe Leu Lys His Ala Gly Lys Glu Thr			
915	920	925	
Ile Val Glu Val Gly Ser Asp Leu Pro Asp Ser Gly Lys Gly Phe Ala			
930	935	940	
Ser Arg Glu Asn Arg Arg Asn Asn Gly Leu Ser Gly Lys Cys Leu Gln			
945	950	955	960
Glu Ala Gln Glu Glu Gly Asn Ser Ile Leu Pro Glu Arg Arg Gly Arg			
965	970	975	
Pro Glu Ile Ser Leu Asp Glu Arg Gly Glu Gly Gly His Val His Thr			
980	985	990	
Ser Asp Asp Ser Glu Val Val Phe Ser Ser Cys Asp Leu Asn Leu Thr			
995	1000	1005	
Met Glu Asp Ser Asp Gly Val Thr Tyr Ala Leu Lys Cys Asp Ser Ser			
1010	1015	1020	
Gly His Ala Pro Glu Ile Val Ser Thr Val His Glu Asp Tyr Ser Gly			
1025	1030	1035	1040
Ser Ser Glu Ser Ser Asn Asp Glu Ser Asp Ser Glu Asp Thr Asp Ser			
1045	1050	1055	
Asp Asp Ser Ser Ile Pro Arg Asn Arg Leu Gln Ser Val Val Val Val			
1060	1065	1070	
Pro Lys Asn Ser Thr Leu Pro Met Glu Glu Thr Ser Pro Cys Ser Ser			

1075	1080	1085
Arg Ser Ser Gln Ser Tyr Arg His Tyr Ser Asp His Trp Glu Asp Glu		
1090	1095	1100
Arg Leu Glu Ser Arg Arg His Leu Tyr Glu Glu Lys Phe Glu Ser Ile		
1105	1110	1115
Ala Ser Lys Ala Cys Pro Gln Thr Asp Lys Phe Phe Leu His Lys Gly		
1125	1130	1135
Thr Glu Lys Asn Pro Glu Ile Ser Phe Thr Gln Ser Ser Arg Lys Gln		
1140	1145	1150
Ile Asp Asn Arg Leu Pro Glu Leu Ser His Pro Gln Ser Asp Gly Val		
1155	1160	1165
Asp Ser Thr Ser His Thr Asp Val Lys Ser Asp Pro Leu Gly His Pro		
1170	1175	1180
Asn Ser Glu Glu Thr Val Lys Ala Lys Ile Pro Ser Arg Gln Gln Glu		
1185	1190	1195
Glu Leu Pro Ile Tyr Ser Ser Asp Phe Glu Asp Phe Pro Asn Lys Ser		
1205	1210	1215
Trp Gln Gln Thr Thr Phe Gln Asn Arg Pro Asp Ser Arg Leu Gly Lys		
1220	1225	1230
Thr Glu Leu Ser Phe Ser Ser Ser Cys Glu Ile Pro His Val Asp Gly		
1235	1240	1245
Leu His Ser Ser Glu Glu Leu Arg Asn Leu Gly Trp Asp Phe Ser Gln		
1250	1255	1260
Glu Lys Pro Ser Thr Thr Tyr Gln Gln Pro Asp Ser Ser Tyr Gly Ala		
1265	1270	1275
Cys Gly Gly His Lys Tyr Gln Gln Asn Ala Glu Gln Tyr Gly Gly Thr		
1285	1290	1295
Arg Asp Tyr Trp Gln Gly Asn Gly Tyr Trp Asp Pro Arg Ser Gly Arg		
1300	1305	1310
Pro Pro Gly Thr Gly Val Val Tyr Asp Arg Thr Gln Gly Gln Val Pro		
1315	1320	1325
Asp Ser Leu Thr Asp Asp Arg Glu Glu Glu Glu Asn Trp Asp Gln Gln		
1330	1335	1340
Asp Gly Ser His Phe Ser Asp Gln Ser Asp Lys Phe Leu Leu Ser Leu		
1345	1350	1355
Gln Lys Asp Lys Gly Ser Val Gln Ala Pro Glu Ile Ser Ser Asn Ser		

1365 1370 1375
 Ile Lys Asp Thr Leu Ala Val Asn Glu Lys Lys Asp Phe
 1380 1385

<210> 4702
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 4702
 Met Val Gly Leu Leu Phe His Ala Pro Lys Ala Pro Glu Met Ala Pro
 1 5 10 15
 Leu Arg Cys Cys Ile Met Asn Lys Ile Ile Met Val Arg Arg Pro Lys
 20 25 30
 Gln Ser Thr Ala Asp Tyr Gly Met Arg Thr Ser Gly Pro Val Glu Ser
 35 40 45
 Gly Leu Ser Ala Asp Ser Leu Gln Leu Leu Cys Ser Tyr Ala Ala Ile
 50 55 60
 Lys Asn Ser Ala Glu Leu Leu Met Val Gly Pro Gln Gly Met Arg Pro
 65 70 75 80
 Ala Thr Gly Gln Asp Leu Leu Cys Arg Pro Cys Leu Ser His Asp Pro
 85 90 95
 Pro Gly Pro Leu His Pro Pro Arg Gly Leu Ser Gly Ser Ser Ser Leu
 100 105 110
 Leu Ile Ser Pro Arg Leu Gln Asp Val Ser Leu Gln Leu Val His Pro
 115 120 125
 Thr Pro Glu Glu Ser Phe
 130

<210> 4703
 <211> 743
 <212> PRT
 <213> Homo sapiens

<400> 4703

Met Ser Ser Leu Ala Ala Lys Arg Leu Gly Met Asn Arg Arg Pro Ala
 1 5 10 15
 Gly Ser Gly Gly Gly Gly Gly Glu Ala Ala Thr Trp Gly His Arg Phe
 20 25 30
 Trp Arg Pro Gln Glu Arg Pro Thr Asp Arg Asn Gln Gly Glu Met Ala
 35 40 45
 His Thr Cys Arg Gly Thr Ile Asn Leu Ser Thr Ala His Ile Asp Thr
 50 55 60
 Glu Asp Ser Cys Gly Ile Leu Leu Thr Ser Gly Ala Arg Ser Tyr His
 65 70 75 80
 Leu Lys Ala Ser Ser Glu Val Asp Arg Gln Gln Trp Ile Thr Ala Leu
 85 90 95
 Glu Leu Ala Lys Ala Lys Ala Val Arg Val Met Asn Thr His Ser Asp
 100 105 110
 Asp Ser Gly Asp Asp Asp Glu Ala Thr Thr Pro Ala Asp Lys Ser Glu
 115 120 125
 Leu His His Thr Leu Lys Asn Leu Ser Leu Lys Leu Asp Asp Leu Ser
 130 135 140
 Thr Cys Asn Asp Leu Ile Ala Lys His Gly Ala Ala Leu Gln Arg Ser
 145 150 155 160
 Leu Thr Glu Leu Asp Gly Leu Lys Ile Pro Ser Glu Ser Gly Glu Lys
 165 170 175
 Leu Lys Val Val Asn Glu Arg Ala Thr Leu Phe Arg Ile Thr Ser Asn
 180 185 190
 Ala Met Ile Asn Ala Cys Arg Asp Phe Leu Glu Leu Ala Glu Ile His
 195 200 205
 Ser Arg Lys Trp Gln Arg Ala Leu Gln Tyr Glu Gln Glu Gln Arg Val
 210 215 220
 His Leu Glu Glu Thr Ile Glu Gln Leu Ala Lys Gln His Asn Ser Leu
 225 230 235 240
 Glu Arg Ala Phe His Ser Ala Pro Gly Arg Pro Ala Asn Pro Ser Lys
 245 250 255
 Ser Phe Ile Glu Gly Ser Leu Leu Thr Pro Lys Gly Glu Asp Ser Glu
 260 265 270
 Glu Asp Glu Asp Thr Glu Tyr Phe Asp Ala Met Glu Asp Ser Thr Ser

275	280	285
Phe Ile Thr Val Ile Thr Glu Ala Lys Glu Asp Ser Arg Lys Ala Glu		
290	295	300
Gly Ser Thr Gly Thr Ser Ser Val Asp Trp Ser Ser Ala Asp Asn Val		
305	310	315
Leu Asp Gly Ala Ser Leu Val Pro Lys Gly Ser Ser Lys Val Lys Arg		
	325	330
Arg Val Arg Ile Pro Asn Lys Pro Asn Tyr Ser Leu Asn Leu Trp Ser		
340	345	350
Ile Met Lys Asn Cys Ile Gly Arg Glu Leu Ser Arg Ile Pro Met Pro		
355	360	365
Val Asn Phe Asn Glu Pro Leu Ser Met Leu Gln Arg Leu Thr Glu Asp		
370	375	380
Leu Glu Tyr His His Leu Leu Asp Lys Ala Val His Cys Thr Ser Ser		
385	390	395
Val Glu Gln Met Cys Leu Val Ala Ala Phe Ser Val Ser Ser Tyr Ser		
	405	410
Thr Thr Val His Arg Ile Ala Lys Pro Phe Asn Pro Met Leu Gly Glu		
420	425	430
Thr Phe Glu Leu Asp Arg Leu Asp Asp Met Gly Leu Arg Ser Leu Cys		
435	440	445
Glu Gln Val Ser His His Pro Pro Ser Ala Ala His Tyr Val Phe Ser		
450	455	460
Lys His Gly Trp Ser Leu Trp Gln Glu Ile Thr Ile Ser Ser Lys Phe		
465	470	475
Arg Gly Lys Tyr Ile Ser Ile Met Pro Leu Gly Ala Ile His Leu Glu		
	485	490
Phe Gln Ala Ser Gly Asn His Tyr Val Trp Arg Lys Ser Thr Ser Thr		
500	505	510
Val His Asn Ile Ile Val Gly Lys Leu Trp Ile Asp Gln Ser Gly Asp		
515	520	525
Ile Glu Ile Val Asn His Lys Thr Asn Asp Arg Cys Gln Leu Lys Phe		
530	535	540
Leu Pro Tyr Ser Tyr Phe Ser Lys Glu Ala Ala Arg Lys Val Thr Gly		
545	550	555
		560

Val Val Ser Asp Ser Gln Gly Lys Ala His Tyr Val Leu Ser Gly Ser
 565 570 575
 Trp Asp Glu Gln Met Glu Cys Ser Lys Val Met His Ser Ser Pro Ser
 580 585 590
 Ser Pro Ser Ser Asp Gly Lys Gln Lys Thr Val Tyr Gln Thr Leu Ser
 595 600 605
 Ala Lys Leu Leu Trp Lys Lys Tyr Pro Leu Pro Glu Asn Ala Glu Asn
 610 615 620
 Met Tyr Tyr Phe Ser Glu Leu Ala Leu Thr Leu Asn Glu His Glu Glu
 625 630 635 640
 Gly Val Ala Pro Thr Asp Ser Arg Leu Arg Pro Asp Gln Arg Leu Met
 645 650 655
 Glu Lys Gly Arg Trp Asp Glu Ala Asn Thr Glu Lys Gln Arg Leu Glu
 660 665 670
 Glu Lys Gln Arg Leu Ser Arg Arg Arg Arg Leu Glu Ala Cys Gly Pro
 675 680 685
 Gly Ser Ser Cys Ser Ser Glu Glu Glu Lys Glu Ala Asp Ala Tyr Thr
 690 695 700
 Pro Leu Trp Phe Glu Lys Arg Leu Asp Pro Leu Thr Gly Glu Met Ala
 705 710 715 720
 Cys Val Tyr Lys Gly Gly Tyr Trp Glu Ala Lys Glu Lys Gln Asp Trp
 725 730 735
 His Met Cys Pro Asn Ile Phe
 740

<210> 4704

<211> 577

<212> PRT

<213> Homo sapiens

<400> 4704

Met Glu Asn Glu Arg Thr Lys Asp Leu Ile Ile Glu Gln Arg Phe His
 1 5 10 15
 Arg Thr Ile Ile Gly Gln Lys Gly Glu Arg Ile Arg Glu Ile Arg Asp
 20 25 30

Lys Phe Pro Glu Val Ile Ile Asn Phe Pro Asp Pro Ala Gln Lys Ser
 35 40 45
 Asp Ile Val Gln Leu Arg Gly Pro Lys Asn Glu Val Glu Lys Cys Thr
 50 55 60
 Lys Tyr Met Gln Lys Met Val Ala Asp Leu Val Glu Asn Ser Tyr Ser
 65 70 75 80
 Ile Ser Val Pro Ile Phe Lys Gln Phe His Lys Asn Ile Ile Gly Lys
 85 90 95
 Gly Gly Ala Asn Ile Lys Lys Ile Arg Glu Glu Ser Asn Thr Lys Ile
 100 105 110
 Asp Leu Pro Ala Glu Asn Ser Asn Ser Glu Thr Ile Ile Ile Thr Gly
 115 120 125
 Lys Arg Ala Asn Cys Glu Ala Ala Arg Ser Arg Ile Leu Ser Ile Gln
 130 135 140
 Lys Asp Leu Ala Asn Ile Ala Glu Val Glu Val Ser Ile Pro Ala Lys
 145 150 155 160
 Leu His Asn Ser Leu Ile Gly Thr Lys Gly Arg Leu Ile Arg Ser Ile
 165 170 175
 Met Glu Glu Cys Gly Gly Val His Ile His Phe Pro Val Glu Gly Ser
 180 185 190
 Gly Ser Asp Thr Val Val Ile Arg Gly Pro Ser Ser Asp Val Glu Lys
 195 200 205
 Ala Lys Lys Gln Leu Leu His Leu Ala Glu Glu Lys Gln Thr Lys Ser
 210 215 220
 Phe Thr Val Asp Ile Arg Ala Lys Pro Glu Tyr His Lys Phe Leu Ile
 225 230 235 240
 Gly Lys Gly Gly Gly Lys Ile Arg Lys Val Arg Asp Ser Thr Gly Ala
 245 250 255
 Arg Val Ile Phe Pro Ala Ala Glu Asp Lys Asp Gln Asp Leu Ile Thr
 260 265 270
 Ile Ile Gly Lys Glu Asp Ala Val Arg Glu Ala Gln Lys Glu Leu Glu
 275 280 285
 Ala Leu Ile Gln Asn Leu Asp Asn Val Val Glu Asp Ser Met Leu Val
 290 295 300
 Asp Pro Lys His His Arg His Phe Val Ile Arg Arg Gly Gln Val Leu
 305 310 315 320

Arg Glu Ile Ala Glu Glu Tyr Gly Gly Val Met Val Ser Phe Pro Arg
 325 330 335
 Ser Gly Thr Gln Ser Asp Lys Val Thr Leu Lys Gly Ala Lys Asp Cys
 340 345 350
 Val Glu Ala Ala Lys Lys Arg Ile Gln Glu Ile Ile Glu Asp Leu Glu
 355 360 365
 Ala Gln Val Thr Leu Glu Cys Ala Ile Pro Gln Lys Phe His Arg Ser
 370 375 380
 Val Met Gly Pro Lys Gly Ser Arg Ile Gln Gln Ile Thr Arg Asp Phe
 385 390 395 400
 Ser Val Gln Ile Lys Phe Pro Asp Arg Glu Glu Asn Ala Val His Ser
 405 410 415
 Thr Glu Pro Val Val Gln Glu Asn Gly Asp Glu Ala Gly Glu Gly Arg
 420 425 430
 Glu Ala Lys Asp Cys Asp Pro Gly Ser Pro Arg Arg Cys Asp Ile Ile
 435 440 445
 Ile Ile Ser Gly Arg Lys Glu Lys Cys Glu Ala Ala Lys Glu Ala Leu
 450 455 460
 Glu Ala Leu Val Pro Val Thr Ile Glu Val Glu Val Pro Phe Asn Leu
 465 470 475 480
 His Arg Tyr Val Ile Gly Gln Lys Gly Ser Gly Ile Arg Lys Met Met
 485 490 495
 Asp Glu Phe Glu Val Asp Pro Phe Pro Gly Arg Pro Cys His Arg Ser
 500 505 510
 Gly Leu Ser His Pro Leu Pro Ser Ala Ser Val Leu Ser Gln Leu Pro
 515 520 525
 Val Asp Ser Ala Ser Ser Cys Ser Asp Trp Ala Leu Thr Ser Leu His
 530 535 540
 Gly Gly Trp Pro Ser Leu Ser Pro Leu Leu Gly Pro Arg Ala Asn Gly
 545 550 555 560
 Leu Phe Pro Val Leu Trp Gly Pro Glu Arg Gln Val Ser Pro Leu Phe
 565 570 575
 Thr

<210> 4705

<211> 121

<212> PRT

<213> Homo sapiens

<400> 4705

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Met Val Ala Asp Leu Ile Asn Val Gln Ile Thr Ser Gly Gln Ala Gln
 1             5             10             15
Ser Ala Leu Phe Pro Pro Ser Pro Gln Leu Trp Leu Met Ser Ser Pro
      20             25             30
Phe Leu Pro Trp Pro Arg His Gly Glu Ser Ser Ile Gly Lys Ala Lys
      35             40             45
Val Ser Ser Arg Lys Thr Glu Gly Cys Ala Ser Pro Leu Glu Pro Leu
      50             55             60
Pro Ser Trp Pro Gly Leu Leu Pro Val Ser Val Lys Lys Lys Lys Lys
      65             70             75             80
Lys Lys Lys Ser Asp Met Gln Leu Leu Ser Thr Cys Cys Met Ser Ser
      85             90             95
Met Val Arg Asp Ala Glu Lys Tyr Lys Ala Val Ser Gly Gly Gln Val
      100            105            110
Glu Tyr Gln Leu His His Leu Lys Thr
      115            120

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<210> 4706

<211> 202

<212> PRT

<213> Homo sapiens

<400> 4706

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Met Arg Trp Gly Leu Val Pro Ser Trp Val Lys Glu Pro Lys Lys Phe
 1             5             10             15
Thr Leu Leu Ile Asn Ala Arg Ser Glu Thr Val Arg Asp Lys Pro Ala
      20             25             30
Phe Lys Asn Ala Met Lys Arg Arg Arg Val Leu Val Pro Ser Asp Gly
      35             40             45

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Tyr Tyr Glu Trp Gln Asp Lys Asp Gly Arg Lys Arg Pro Phe Phe Ile
 50 55 60
 His Arg Arg Asp Gly Gln Pro Thr Gly Phe Ala Ala Leu Ala Glu Thr
 65 70 75 80
 Trp Met Gly Pro Asn Gly Glu Glu Phe Asp Ser Val Ala Ile Val Thr
 85 90 95
 Thr Gln Ala Ser Pro Asp Leu Ala Glu Leu His His Arg Val Pro Val
 100 105 110
 Thr Ile Ala Pro Asp Asp Phe Glu Arg Trp Leu Asp Gly Arg Ala Asn
 115 120 125
 Asp Val Glu Asp Val Met Pro Leu Leu Arg Ala Pro Arg Val Gly Glu
 130 135 140
 Phe Ala Trp His Glu Val Ser Thr Arg Val Asn Arg Val Ala Asn Asp
 145 150 155 160
 Asp Glu Gln Leu Val Leu Pro Ile Ser Glu Glu Gln Arg Ala Ala Glu
 165 170 175
 Ala Pro Lys Pro Val Lys Lys Ala Ala Pro Arg Lys Thr Thr Pro Glu
 180 185 190
 Pro Glu Asp Glu Gly Gln Gly Ser Leu Phe
 195 200

<210> 4707

<211> 339

<212> PRT

<213> Homo sapiens

<400> 4707

Met Leu Pro Ser Ala Val Ala Ala His Ala Gly Ala Tyr Trp Asp Val
 1 5 10 15
 Val Ala Ser Ser Ala Leu Leu Asn Leu Pro Ala Ala Pro Gly Phe Gly
 20 25 30
 Asn Leu Gly Lys Ser Phe Leu Ile Glu Asn Leu Leu Arg Val Gly Gly
 35 40 45
 Ala Pro Thr Pro Arg Leu Gln Pro Pro Ala Pro His Asp Pro Ala Thr
 50 55 60

Ala Leu Ala Thr Ala Gly Ala Gln Leu Arg Pro Leu Pro Ala Ser Pro
 65 70 75 80
 Val Pro Leu Lys Leu Cys Pro Ala Ala Glu Gln Val Ser Pro Ala Gly
 85 90 95
 Ala Pro Tyr Gly Thr Arg Trp Ala Phe Gln Val Leu Ser Pro Ser Ala
 100 105 110
 Asp Ser Ala Arg Leu Pro Gly Arg Ala Pro Gly Asp Arg Asp Cys Thr
 115 120 125
 Phe Gln Pro Ser Ala Pro Ala Pro Ser Lys Pro Phe Leu Leu Ser Thr
 130 135 140
 Pro Pro Phe Tyr Ser Ala Cys Cys Gly Gly Ser Cys Arg Arg Pro Ala
 145 150 155 160
 Ser Ser Thr Ala Phe Pro Arg Glu Glu Ser Val Leu Pro Leu Leu Thr
 165 170 175
 Gln Asp Ser Asn Ser Lys Ala Arg Arg Gly Ile Leu Arg Arg Ala Val
 180 185 190
 Phe Ser Glu Asp Gln Arg Lys Ala Leu Glu Lys Met Phe Gln Lys Gln
 195 200 205
 Lys Tyr Ile Ser Lys Thr Asp Arg Lys Lys Leu Ala Ile Asn Leu Gly
 210 215 220
 Leu Lys Glu Ser Gln Val Lys Ile Trp Phe Gln Asn Arg Arg Met Lys
 225 230 235 240
 Trp Arg Asn Ser Lys Glu Lys Glu Val Leu Ser Asn Arg Cys Ile Gln
 245 250 255
 Glu Val Gly Leu Gln Glu Asp Pro Leu Ser Arg Ser Ala Leu Gly Phe
 260 265 270
 Pro Ser Pro Cys Pro Ser Ile Trp Asp Val Pro Gln Gln His Ser Ser
 275 280 285
 Pro Arg Trp Arg Glu Asn Ser Pro Glu Pro Ser Glu Arg Leu Ile Gln
 290 295 300
 Glu Ser Ser Gly Ala Pro Pro Pro Glu Ala Asn Ser Leu Gln Gly Ala
 305 310 315 320
 Leu Tyr Leu Cys Ser Glu Glu Glu Ala Gly Ser Lys Gly Val Leu Thr
 325 330 335
 Gly Ala Val

<210> 4708

<211> 259

<212> PRT

<213> Homo sapiens

<400> 4708

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Met Val Val Gln Gly Lys Arg Met Arg Lys Glu Thr Trp Gly Tyr Phe
  1             5             10             15
Cys Ser Lys Trp Asn Leu Leu Glu Leu Ala Ile Ile Leu Ala Ser Trp
          20             25             30
Ser Ala Leu Ala Val Phe Val Lys Arg Ala Val Leu Ala Glu Arg Asp
          35             40             45
Leu Gln Arg Cys Arg Asn His Arg Glu Glu Gly Ile Ser Phe Ser Glu
          50             55             60
Thr Ala Ala Ala Asp Ala Ala Leu Gly Tyr Ile Ile Val Phe Leu Val
          65             70             75             80
Leu Leu Ser Thr Val Lys Leu Trp His Leu Leu Arg Leu Asn Pro Lys
          85             90             95
Met Asn Met Ile Thr Ala Ala Leu Arg Arg Ala Trp Gly Asp Ile Ser
          100            105            110
Gly Phe Ile Ile Val Ile Leu Thr Met Leu Leu Ala Tyr Ser Ile Ala
          115            120            125
Ser Asn Leu Ile Phe Gly Trp Lys Leu Arg Ser Tyr Lys Thr Leu Phe
          130            135            140
Asp Ala Ala Glu Thr Met Val Ser Leu Gln Leu Gly Ile Phe Asn Tyr
          145            150            155            160
Glu Glu Val Leu Asp Tyr Ser Pro Val Leu Gly Ser Phe Leu Ile Gly
          165            170            175
Ser Cys Ile Val Phe Met Thr Phe Val Val Leu Asn Leu Phe Ile Ser
          180            185            190
Val Ile Leu Val Ala Phe Ser Glu Glu Gln Lys Tyr Tyr Gln Leu Ser
          195            200            205
Glu Glu Gly Glu Ile Val Asp Leu Leu Leu Met Lys Ile Leu Ser Phe
          210            215            220

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Leu Gly Ile Lys Ser Lys Arg Glu Glu Pro Gly Ser Ser Arg Glu Gln
 225 230 235 240
 Pro Gly Ser Leu Ser Gln Thr Arg His Ser Arg Pro Ala Gln Ala Leu
 245 250 255
 Pro Lys Asp

<210> 4709

<211> 722

<212> PRT

<213> Homo sapiens

<400> 4709

Met Met Lys Glu Val Leu Ser Thr Gly Gln Gly Asn Thr Glu Val Ile
 1 5 10 15
 His Thr Gly Thr Leu Gln Arg Tyr Gln Ser Tyr His Ile Gly Asp Phe
 20 25 30
 Cys Phe Gln Glu Ile Glu Lys Glu Ile His Asp Ile Glu Phe Gln Cys
 35 40 45
 Gln Glu Asp Glu Arg Asn Gly His Glu Ala Pro Met Thr Lys Ile Lys
 50 55 60
 Lys Leu Thr Gly Ser Thr Asp Gln His Asp His Arg His Ala Gly Asn
 65 70 75 80
 Lys Pro Ile Lys Asp Gln Leu Gly Ser Ser Phe Tyr Ser His Leu Pro
 85 90 95
 Glu Leu His Ile Ile Gln Ile Lys Gly Lys Ile Gly Asn Gln Phe Glu
 100 105 110
 Lys Ser Thr Ser Asp Ala Pro Ser Val Ser Thr Ser Gln Arg Ile Ser
 115 120 125
 Pro Arg Pro Gln Ile His Ile Ser Asn Asn Tyr Gly Asn Asn Ser Pro
 130 135 140
 Asn Ser Ser Leu Leu Pro Gln Lys Gln Glu Val Tyr Met Arg Glu Lys
 145 150 155 160
 Ser Phe Gln Cys Asn Glu Ser Gly Lys Ala Phe Asn Cys Ser Ser Leu
 165 170 175

Leu Arg Lys His Gln Ile Pro His Leu Gly Asp Lys Gln Tyr Lys Cys
 180 185 190
 Asp Val Cys Gly Lys Leu Phe Asn His Lys Gln Tyr Leu Thr Cys His
 195 200 205
 Arg Arg Cys His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
 210 215 220
 Lys Ser Phe Ser Gln Val Ser Ser Leu Thr Cys His Arg Arg Leu His
 225 230 235 240
 Thr Ala Val Lys Ser His Lys Cys Asn Glu Cys Gly Lys Ile Phe Gly
 245 250 255
 Gln Asn Ser Ala Leu Val Ile His Lys Ala Ile His Thr Gly Glu Lys
 260 265 270
 Pro Tyr Lys Cys Asn Glu Cys Asp Lys Ala Phe Asn Gln Gln Ser Asn
 275 280 285
 Leu Ala Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys
 290 295 300
 Glu Glu Cys Asp Lys Val Phe Ser Arg Lys Ser Thr Leu Glu Ser His
 305 310 315 320
 Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp
 325 330 335
 Thr Ala Phe Thr Trp Asn Ser Gln Leu Ala Arg His Lys Arg Ile His
 340 345 350
 Thr Gly Glu Lys Thr Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser
 355 360 365
 His Lys Ser Ser Leu Val Cys His His Arg Leu His Gly Gly Glu Lys
 370 375 380
 Ser Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala Trp Asn Ser His
 385 390 395 400
 Leu Val Arg His Thr Arg Ile His Ser Gly Gly Lys Pro Tyr Lys Cys
 405 410 415
 Asn Glu Cys Gly Lys Thr Phe Gly Gln Asn Ser Asp Leu Leu Ile His
 420 425 430
 Lys Ser Ile His Thr Gly Glu Gln Pro Tyr Lys Tyr Glu Glu Cys Glu
 435 440 445
 Lys Val Phe Ser Cys Gly Ser Thr Leu Glu Thr His Lys Ile Ile His
 450 455 460

Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala
 465 470 475 480
 Cys His Ser Tyr Leu Ala Lys His Thr Arg Ile His Ser Gly Glu Lys
 485 490 495
 Pro Tyr Lys Cys Asn Glu Cys Ser Lys Thr Phe His Leu Arg Ser Tyr
 500 505 510
 Leu Ala Ser His Arg Arg Val His Ser Gly Glu Lys Pro Tyr Lys Cys
 515 520 525
 Asn Glu Cys Ser Lys Thr Phe Ser Gln Arg Ser Tyr Leu His Cys His
 530 535 540
 Arg Arg Leu His Ser Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
 545 550 555 560
 Lys Thr Phe Ser His Lys Pro Ser Leu Val His His Arg Arg Leu His
 565 570 575
 Thr Gly Glu Lys Ser Tyr Lys Cys Thr Val Cys Asp Lys Ala Phe Val
 580 585 590
 Arg Asn Ser Tyr Leu Ala Arg His Thr Arg Ile His Thr Ala Glu Lys
 595 600 605
 Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Asn Gln Gln Ser Gln
 610 615 620
 Leu Ser Leu His His Arg Ile His Ala Gly Glu Lys Leu Tyr Lys Cys
 625 630 635 640
 Glu Thr Cys Asp Lys Val Phe Ser Arg Lys Ser His Leu Lys Arg His
 645 650 655
 Arg Arg Ile His Pro Gly Lys Lys Pro Tyr Lys Cys Lys Val Cys Asp
 660 665 670

 Lys Thr Phe Gly Ser Asp Ser His Leu Lys Gln His Thr Gly Leu His
 675 680 685
 Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser
 690 695 700
 Lys Gln Ser Thr Leu Ile His His Gln Ala Val His Gly Val Gly Lys
 705 710 715 720
 Leu Asp

<210> 4710

<211> 422

<212> PRT

<213> Homo sapiens

<400> 4710

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Met Phe Gln Thr Ala Trp Arg Gln Glu Pro Val Thr Phe Glu Asp Val
  1             5             10            15
Ala Val Tyr Phe Thr Gln Asn Glu Trp Ala Ser Leu Asp Ser Val Gln
      20             25            30
Arg Ala Leu Tyr Arg Glu Val Met Leu Glu Asn Tyr Ala Asn Val Ala
      35             40            45
Ser Leu Ala Phe Pro Phe Thr Thr Pro Val Leu Val Ser Gln Leu Glu
      50             55            60
Gln Gly Glu Leu Pro Trp Gly Leu Asp Pro Trp Glu Pro Met Gly Arg
      65             70            75            80
Glu Ala Leu Arg Gly Ile Cys Pro Gly Asp Glu Ala Arg Thr Glu Lys
      85             90            95
Glu Gly Leu Thr Pro Lys Asp His Val Ser Lys Glu Thr Glu Ser Phe
      100            105            110
Arg Leu Met Val Gly Gly Leu Pro Gly Asn Val Ser Gln His Leu Asp
      115            120            125
Phe Gly Ser Ser Leu Glu Gln Pro Gln Gly His Trp Ile Ile Lys Thr
      130            135            140
Lys Ser Lys Arg Arg His Phe Thr Asp Thr Ser Ala Arg His His Glu
      145            150            155            160
Ala Tyr Glu Val Lys Asn Gly Glu Lys Phe Glu Lys Leu Gly Lys Asn
      165            170            175
Ile Ser Val Ser Thr Gln Leu Thr Thr Asn Gln Thr Asn Pro Ser Gly
      180            185            190
Gln Ile Ser Tyr Glu Cys Gly Gln Cys Gly Arg Tyr Phe Ile Gln Met
      195            200            205
Ala Asp Phe His Arg His Glu Lys Cys His Thr Gly Glu Lys Ser Phe
      210            215            220
Glu Cys Lys Glu Cys Gly Lys Tyr Phe Arg Tyr Asn Ser Leu Leu Ile

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225 230 235 240
 Arg His Gln Ile Ile His Thr Gly Lys Lys Pro Phe Lys Cys Lys Glu
 245 250 255

 Cys Gly Lys Gly Leu Ser Ser Asp Thr Ala Leu Ile Gln His Gln Arg
 260 265 270
 Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala
 275 280 285
 Phe Ser Ser Ser Ser Val Phe Leu Gln His Gln Arg Phe His Thr Gly
 290 295 300
 Glu Lys Leu Tyr Glu Cys Asn Glu Cys Trp Lys Thr Phe Ser Cys Ser
 305 310 315 320
 Ser Ser Phe Thr Val His Gln Arg Met His Thr Gly Glu Lys Pro Tyr
 325 330 335
 Glu Cys Lys Glu Cys Gly Lys Arg Leu Ser Ser Asn Thr Ala Leu Thr
 340 345 350
 Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Lys Glu
 355 360 365
 Cys Gly Lys Ala Phe Asn Gln Lys Ile Thr Leu Ile Gln His Gln Arg
 370 375 380
 Val His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Val Cys Gly Lys Thr
 385 390 395 400
 Phe Ser Trp Cys Gly Arg Phe Ile Leu His Gln Lys Leu His Thr Gln
 405 410 415
 Lys Thr Pro Val Gln Ala
 420

<210> 4711

<211> 446

<212> PRT

<213> Homo sapiens

<400> 4711

Met Glu Arg Ile Pro Val Ser Val Asp Phe Trp Val Val Cys Cys Ala
 1 5 10 15

Val Leu Lys Cys Asn Pro Gly Ile Pro Lys Arg Met Ser Thr Leu Cys
 20 25 30
 Phe Gly Phe Ser Asp Glu Phe His Pro Phe Ile Glu Ala Leu Leu Pro
 35 40 45
 His Val Arg Ala Ile Ala Tyr Thr Trp Phe Asn Leu Gln Ala Gly Lys
 50 55 60
 Arg Lys Tyr Phe Lys Lys His Glu Lys Arg Met Ser Lys Asp Glu Glu
 65 70 75 80
 Arg Ala Val Lys Asp Glu Leu Leu Ser Glu Lys Pro Glu Ile Lys Gln
 85 90 95
 Lys Trp Ala Ser Arg Leu Leu Ala Lys Leu Arg Lys Asp Ile Arg Gln
 100 105 110
 Glu Tyr Arg Glu Asp Phe Val Leu Thr Val Thr Gly Lys Lys His Pro
 115 120 125
 Cys Cys Val Leu Ser Asn Pro Asp Gln Lys Gly Lys Ile Arg Arg Ile
 130 135 140
 Asp Cys Leu Arg Gln Ala Asp Lys Val Trp Arg Leu Asp Leu Val Met
 145 150 155 160
 Val Ile Leu Phe Lys Gly Ile Pro Leu Glu Ser Thr Asp Gly Glu Arg
 165 170 175
 Leu Met Lys Ser Pro His Cys Thr Asn Pro Ala Leu Cys Val Gln Pro
 180 185 190
 His His Ile Thr Val Ser Val Lys Glu Leu Asp Leu Phe Leu Ala Tyr
 195 200 205
 Tyr Val Gln Glu Gln Asp Ser Gly Gln Ser Gly Ser Pro Ser His Ser
 210 215 220
 Asp Pro Ala Lys Asn Pro Pro Gly Tyr Leu Glu Asp Ser Phe Val Lys
 225 230 235 240
 Ser Gly Val Phe Asn Val Ser Glu Leu Val Arg Val Ser Arg Thr Pro
 245 250 255
 Ile Thr Gln Gly Thr Gly Val Asn Phe Pro Ile Gly Glu Ile Pro Ser
 260 265 270
 Gln Pro Tyr Tyr His Asp Met Asn Ser Gly Val Asn Leu Gln Arg Ser
 275 280 285
 Leu Ser Ser Pro Pro Ser Ser Lys Arg Pro Lys Thr Ile Ser Ile Asp
 290 295 300

Glu Asn Met Glu Pro Ser Pro Thr Gly Asp Phe Tyr Pro Ser Pro Ser
 305 310 315 320
 Ser Pro Ala Ala Gly Ser Arg Thr Trp His Glu Arg Asp Gln Asp Met
 325 330 335
 Ser Ser Pro Thr Thr Met Lys Lys Pro Glu Lys Pro Leu Phe Ser Ser
 340 345 350
 Ala Ser Pro Gln Asp Ser Ser Pro Arg Leu Ser Thr Phe Pro Gln His
 355 360 365
 His His Pro Gly Ile Pro Gly Val Ala His Ser Val Ile Ser Thr Arg
 370 375 380
 Thr Pro Pro Pro Pro Ser Pro Leu Pro Phe Pro Thr Gln Ala Ile Leu
 385 390 395 400
 Pro Pro Ala Pro Ser Ser Tyr Phe Ser His Pro Thr Ile Arg Tyr Pro
 405 410 415
 Pro His Leu Asn Pro Gln Asp Thr Leu Lys Asn Tyr Val Pro Ser Tyr
 420 425 430
 Asp Pro Ser Ser Pro Gln Thr Ser Gln Ser Trp Tyr Leu Gly
 435 440 445

<210> 4712

<211> 488

<212> PRT

<213> Homo sapiens

<400> 4712

Met Arg Ile Ile Thr Ala Pro Ala Ser Lys Val Ser Arg Gly Ser Asn
 1 5 10 15
 Glu Leu Met Ile Leu Ala Arg Arg Ser Asp Arg Gly Ser Pro Thr Ser
 20 25 30
 Pro Ala His Ser Leu Ser Arg Lys Ser Pro Ile Met Tyr Pro Ser Thr
 35 40 45
 Thr Met Ala Asn Ala Pro Gly Leu Val Ser Cys Thr Phe Phe Leu Ala
 50 55 60
 Val Asn Gly Leu Tyr Ser Ser Ser Asp Asp Val Ile Glu Leu Thr Pro
 65 70 75 80

Ser	Asn	Phe	Asn	Arg	Glu	Val	Ile	Gln	Ser	Asp	Ser	Leu	Trp	Leu	Val
85				90				95							
Glu	Phe	Tyr	Ala	Pro	Trp	Cys	Gly	His	Cys	Gln	Arg	Leu	Thr	Pro	Glu
100				105				110							
Trp	Lys	Lys	Ala	Ala	Thr	Ala	Leu	Lys	Asp	Val	Val	Lys	Val	Gly	Ala
115				120				125							
Val	Asp	Ala	Asp	Lys	His	His	Ser	Leu	Gly	Gly	Gln	Tyr	Gly	Val	Gln
130				135				140							
Gly	Phe	Pro	Thr	Ile	Lys	Ile	Phe	Gly	Ser	Asn	Lys	Asn	Arg	Pro	Glu
145				150				155				160			
Asp	Tyr	Gln	Gly	Gly	Arg	Thr	Gly	Glu	Ala	Ile	Val	Asp	Ala	Ala	Leu
165				170				175							
Ser	Ala	Leu	Arg	Gln	Leu	Val	Lys	Asp	Arg	Leu	Gly	Gly	Arg	Ser	Gly
180				185				190							
Gly	Tyr	Ser	Ser	Gly	Lys	Gln	Gly	Arg	Ser	Asp	Ser	Ser	Ser	Lys	Lys
195				200				205							
Asp	Val	Ile	Glu	Leu	Thr	Asp	Asp	Ser	Phe	Asp	Lys	Asn	Val	Leu	Asp
210				215				220							
Ser	Glu	Asp	Val	Trp	Met	Val	Glu	Phe	Tyr	Ala	Pro	Trp	Cys	Gly	His
225				230				235				240			
Cys	Lys	Asn	Leu	Glu	Pro	Glu	Trp	Ala	Ala	Ala	Ala	Ser	Glu	Val	Lys
245				250				255							
Glu	Gln	Thr	Lys	Gly	Arg	Val	Lys	Leu	Ala	Ala	Val	Asp	Ala	Thr	Val
260				265				270							
Asn	Gln	Val	Leu	Ala	Ser	Arg	Tyr	Gly	Ile	Arg	Gly	Phe	Pro	Thr	Ile
275				280				285							
Lys	Ile	Phe	Gln	Lys	Gly	Glu	Ser	Pro	Val	Asp	Tyr	Asp	Gly	Gly	Arg
290				295				300							
Thr	Arg	Ser	Asp	Ile	Val	Ser	Arg	Ala	Leu	Asp	Leu	Phe	Ser	Asp	Asn
305				310				315				320			
Ala	Pro	Pro	Pro	Glu	Leu	Leu	Glu	Ile	Ile	Asn	Glu	Asp	Ile	Ala	Lys
325				330				335							
Arg	Thr	Cys	Glu	Glu	His	Gln	Leu	Cys	Val	Val	Ala	Val	Leu	Pro	His
340				345				350							
Ile	Leu	Asp	Thr	Gly	Ala	Ala	Gly	Arg	Asn	Ser	Tyr	Leu	Glu	Val	Leu
355				360				365							

Leu Lys Leu Ala Asp Lys Tyr Lys Lys Lys Met Trp Gly Trp Leu Trp
 370 375 380
 Thr Glu Ala Gly Ala Gln Ser Glu Leu Glu Thr Ala Leu Gly Ile Gly
 385 390 395 400
 Gly Phe Gly Tyr Pro Ala Met Ala Ala Ile Asn Ala Arg Lys Met Lys
 405 410 415
 Phe Ala Leu Leu Lys Gly Ser Phe Ser Glu Gln Gly Ile Asn Glu Phe
 420 425 430
 Leu Arg Glu Leu Ser Phe Gly Arg Gly Ser Thr Ala Pro Val Gly Gly
 435 440 445
 Gly Ala Phe Pro Thr Ile Val Glu Arg Glu Pro Trp Asp Gly Arg Asp
 450 455 460
 Gly Glu Leu Pro Val Glu Asp Asp Ile Asp Leu Ser Asp Val Glu Leu
 465 470 475 480
 Asp Asp Leu Gly Lys Asp Glu Leu
 485

<210> 4713

<211> 318

<212> PRT

<213> Homo sapiens

<400> 4713

Met Val Leu Ser Ser Gly Pro Gln Trp Cys Gly Ser Gln Glu Leu Trp
 1 5 10 15
 Phe Gly Lys Thr Cys Glu Glu Lys Ser Arg Leu Gly Arg Trp Pro Gly
 20 25 30
 Tyr Leu Asn Gly Gly Arg Met Glu Ser Ser Thr Asn Asp Ile Ile Glu
 35 40 45
 Val Ile Val Lys Asp Glu Met Ile Ser Val Glu Glu Ser Ser Gly Asn
 50 55 60
 Thr Asp Val Asn Asn Leu Leu Gly Ile His His Lys Ile Leu Asn Glu
 65 70 75 80
 Gln Ile Phe Tyr Ile Cys Glu Glu Cys Gly Lys Cys Phe Asp Gln Asn
 85 90 95

Glu Asp Phe Asp Gln His Gln Lys Thr His Asn Gly Glu Lys Val Tyr
 100 105 110
 Gly Cys Lys Glu Cys Gly Lys Ala Phe Ser Phe Arg Ser His Cys Ile
 115 120 125
 Ala His Gln Arg Ile His Ser Gly Val Lys Pro Tyr Glu Cys Gln Glu
 130 135 140
 Cys Ala Lys Ala Phe Val Trp Lys Ser Asn Leu Ile Arg His Gln Arg
 145 150 155 160
 Ile His Thr Gly Glu Lys Pro Phe Glu Cys Lys Glu Cys Gly Lys Gly
 165 170 175
 Phe Ser Gln Asn Thr Ser Leu Thr Gln His Gln Arg Ile His Thr Gly
 180 185 190
 Glu Lys Pro Tyr Thr Cys Lys Glu Cys Gly Lys Ser Phe Thr Arg Asn
 195 200 205
 Pro Ala Leu Leu Arg His Gln Arg Met His Thr Gly Glu Lys Pro Tyr
 210 215 220
 Glu Cys Lys Asp Cys Gly Lys Gly Phe Met Trp Asn Ser Asp Leu Ser
 225 230 235 240
 Gln His Gln Arg Val His Thr Gly Asp Lys Pro His Glu Cys Thr Asp
 245 250 255
 Cys Gly Lys Ser Phe Phe Cys Lys Ala His Leu Ile Arg His Gln Arg
 260 265 270
 Ile His Thr Gly Glu Arg Pro Tyr Lys Cys Asn Asp Cys Gly Lys Ala
 275 280 285
 Phe Ser Gln Asn Ser Val Leu Ile Lys His Gln Arg Arg His Ala Arg
 290 295 300
 Asp Lys Pro Tyr Asn Cys Gln Ile Ser His Leu Leu Glu His
 305 310 315

<210> 4714

<211> 743

<212> PRT

<213> Homo sapiens

<400> 4714

Met Ile Ser Gln Phe Phe Ile Leu Ser Ser Lys Gly Asp Pro Leu Ile
 1 5 10 15
 Tyr Lys Asp Phe Arg Gly Asp Ser Gly Gly Arg Asp Val Ala Glu Leu
 20 25 30
 Phe Tyr Arg Lys Leu Thr Gly Leu Pro Gly Asp Glu Ser Pro Val Val
 35 40 45
 Met Asp Tyr Gly Tyr Val Gln Thr Thr Ser Thr Glu Met Leu Arg Asn
 50 55 60
 Phe Ile Gln Thr Glu Ala Val Val Ser Lys Pro Phe Ser Leu Phe Asp
 65 70 75 80
 Leu Ser Ser Val Gly Leu Phe Gly Ala Glu Thr Gln Gln Ser Lys Val
 85 90 95
 Ala Pro Ser Ser Ala Ala Ser Arg Pro Val Leu Ser Ser Arg Ser Asp
 100 105 110
 Gln Ser Gln Lys Asn Glu Val Phe Leu Asp Val Val Glu Arg Leu Ser
 115 120 125
 Val Leu Ile Ala Ser Asn Gly Ser Leu Leu Lys Val Asp Val Gln Gly
 130 135 140
 Glu Ile Arg Leu Lys Ser Phe Leu Pro Ser Gly Ser Glu Met Arg Ile
 145 150 155 160
 Gly Leu Thr Glu Glu Phe Cys Val Gly Lys Ser Glu Leu Arg Gly Tyr
 165 170 175
 Gly Pro Gly Ile Arg Val Asp Glu Val Ser Phe His Ser Ser Val Asn
 180 185 190
 Leu Asp Glu Phe Glu Ser His Arg Ile Leu Arg Leu Gln Pro Pro Gln
 195 200 205
 Gly Glu Leu Thr Val Met Arg Tyr Gln Leu Ser Asp Asp Leu Pro Ser
 210 215 220
 Pro Leu Pro Phe Arg Leu Phe Pro Ser Val Gln Trp Asp Arg Gly Ser
 225 230 235 240
 Gly Arg Leu Gln Val Tyr Leu Lys Leu Arg Cys Asp Leu Leu Ser Lys
 245 250 255
 Ser Gln Ala Leu Asn Val Arg Leu His Leu Pro Leu Pro Arg Gly Val
 260 265 270
 Val Ser Leu Ser Gln Glu Leu Ser Ser Pro Glu Gln Lys Ala Glu Leu
 275 280 285

Ala Glu Gly Ala Leu Arg Trp Asp Leu Pro Arg Val Gln Gly Gly Ser
 290 295 300
 Gln Leu Ser Gly Leu Phe Gln Ser Arg Lys Gly Ala Asp Leu Asp Arg
 305 310 315 320
 Glu Lys Lys Ala Ala Glu Cys Lys Val Asp Ser Ile Gly Ser Gly Arg
 325 330 335
 Ala Ile Pro Ile Lys Gln Gly Ile Leu Leu Lys Arg Ser Gly Lys Ser
 340 345 350
 Leu Asn Lys Glu Trp Lys Lys Lys Tyr Val Thr Leu Cys Asp Asn Gly
 355 360 365
 Leu Leu Thr Tyr His Pro Ser Leu His Asp Tyr Met Gln Asn Ile His
 370 375 380
 Gly Lys Glu Ile Asp Leu Leu Arg Thr Thr Val Lys Val Pro Gly Lys
 385 390 395 400
 Arg Leu Pro Arg Ala Thr Pro Ala Thr Ala Pro Gly Thr Ser Pro Arg
 405 410 415
 Ala Asn Gly Leu Ser Val Glu Arg Ser Asn Thr Gln Leu Gly Gly Gly
 420 425 430
 Thr Glu Ala Glu Glu Ser Phe Glu Phe Val Val Val Ser Leu Thr Gly
 435 440 445
 Gln Thr Trp His Phe Glu Ala Ser Thr Ala Glu Glu Arg Glu Leu Trp
 450 455 460
 Val Gln Ser Val Gln Ala Gln Ile Leu Ala Ser Leu Gln Gly Cys Arg
 465 470 475 480
 Ser Ala Lys Asp Lys Thr Arg Leu Gly Asn Gln Asn Ala Ala Leu Ala
 485 490 495
 Val Gln Ala Val Arg Thr Val Arg Gly Asn Ser Phe Cys Ile Asp Cys
 500 505 510
 Asp Ala Pro Asn Pro Asp Trp Ala Ser Leu Asn Leu Gly Ala Leu Met
 515 520 525
 Cys Ile Glu Cys Ser Gly Ile His Arg His Leu Gly Ala His Leu Ser
 530 535 540
 Arg Val Arg Ser Leu Asp Leu Asp Asp Trp Pro Pro Glu Leu Leu Ala
 545 550 555 560
 Val Met Thr Ala Met Gly Asn Ala Leu Ala Asn Ser Val Trp Glu Gly
 565 570 575

Ala Leu Gly Gly Tyr Ser Lys Pro Gly Pro Asp Ala Cys Arg Glu Glu
 580 585 590
 Lys Glu Arg Trp Ile Arg Ala Lys Tyr Glu Gln Lys Leu Phe Leu Ala
 595 600 605
 Pro Leu Pro Ser Ser Asp Val Pro Leu Gly Gln Gln Leu Leu Arg Ala
 610 615 620
 Val Val Glu Asp Asp Leu Arg Leu Leu Val Met Leu Leu Ala His Gly
 625 630 635 640
 Ser Lys Glu Glu Val Asn Glu Thr Tyr Gly Asp Gly Asp Gly Arg Thr
 645 650 655
 Ala Leu His Leu Ser Ser Ala Met Ala Asn Val Val Phe Thr Gln Leu
 660 665 670
 Leu Ile Trp Tyr Gly Val Asp Val Arg Ser Arg Asp Ala Arg Gly Leu
 675 680 685
 Thr Pro Leu Ala Tyr Ala Arg Arg Ala Gly Ser Gln Glu Cys Ala Asp
 690 695 700
 Ile Leu Ile Gln His Gly Cys Pro Gly Glu Gly Cys Gly Leu Ala Pro
 705 710 715 720
 Thr Pro Asn Arg Glu Pro Ala Asn Gly Thr Asn Pro Ser Ala Glu Leu
 725 730 735
 His Arg Ser Pro Ser Leu Leu
 740

<210> 4715

<211> 141

<212> PRT

<213> Homo sapiens

<400> 4715

Met Gln Ile Gln Glu Ile Gln Arg Thr Pro Leu Arg Tyr Ser Lys Arg
 1 5 10 15
 Arg Ser Thr Pro Arg Pro Leu Ile Ile Gly Phe Ser Lys Val Glu Leu
 20 25 30
 Leu Arg Ala Ala Arg Glu Lys Gly Gln Val Thr Tyr Lys Gly Lys Pro
 35 40 45

Ile Arg Pro Thr Ala Asp Phe Ser Ala Glu Pro Leu Gln Ala Arg Arg
 50 55 60
 Asp Cys Gly Pro Ile Ser Asn Ile Leu Lys Gly Lys Asn Phe Gln Pro
 65 70 75 80
 Arg Ile Ser Tyr Pro Ala Lys Leu Ile Ser Phe Ile Ser Glu Gly Glu
 85 90 95
 Ile Lys Ser Phe Pro Asp Lys Gln Met Leu Arg Asp Phe Val Thr Thr
 100 105 110
 Arg Pro Ala Leu Gln Glu Leu Leu Lys Glu Ala Leu Asn Met Glu Arg
 115 120 125
 Lys Asn Gln Tyr Gln Pro Leu Gln Lys His Thr Lys Ile
 130 135 140

<210> 4716

<211> 715

<212> PRT

<213> Homo sapiens

<400> 4716

Met Ala Thr Phe Met Asp Pro Gly Val Phe Pro Arg Ala Asp Glu Asp
 1 5 10 15
 Glu Asp Lys Glu Asp Asp Phe Arg Ala Pro Leu Tyr Lys Asn Val Asp
 20 25 30
 Val Arg Gly Ile Gln Val Arg Met Lys Trp Cys Ala Thr Cys His Phe
 35 40 45
 Tyr Arg Pro Pro Arg Cys Ser His Cys Ser Val Cys Asp Asn Cys Val
 50 55 60
 Glu Asp Phe Asp His His Cys Pro Trp Val Asn Asn Cys Ile Gly Arg
 65 70 75 80
 Arg Asn Tyr Arg Tyr Phe Phe Leu Phe Leu Leu Ser Leu Ser Ala His
 85 90 95
 Met Val Gly Val Val Ala Phe Gly Leu Val Tyr Val Leu Asn His Ala
 100 105 110
 Glu Gly Leu Gly Ala Ala His Thr Thr Ile Thr Met Ala Val Met Cys
 115 120 125

Val Ala Gly Leu Phe Phe Ile Pro Val Ile Gly Leu Thr Gly Phe His			
130	135	140	
Val Val Leu Val Thr Arg Gly Arg Thr Thr Asn Glu Gln Val Thr Gly			
145	150	155	160
Lys Phe Arg Gly Gly Val Asn Pro Phe Thr Arg Gly Cys Cys Gly Asn			
	165	170	175
Val Glu His Val Leu Cys Ser Pro Leu Ala Pro Arg Tyr Val Val Glu			
	180	185	190
Pro Pro Arg Leu Pro Leu Ala Val Ser Leu Lys Pro Pro Phe Leu Arg			
	195	200	205
Pro Glu Leu Leu Asp Arg Ala Ala Pro Leu Lys Val Lys Leu Ser Asp			
	210	215	220
Asn Gly Leu Lys Ala Gly Leu Gly Arg Ser Lys Ser Lys Gly Ser Leu			
225	230	235	240
Asp Arg Leu Asp Glu Lys Pro Leu Asp Leu Gly Pro Pro Leu Pro Pro			
	245	250	255
Lys Ile Glu Ala Gly Thr Phe Ser Ser Asp Leu Gln Thr Pro Arg Pro			
	260	265	270
Gly Ser Ala Glu Ser Ala Leu Ser Val Gln Arg Thr Ser Pro Pro Thr			
	275	280	285
Pro Ala Met Tyr Lys Phe Arg Pro Ala Phe Pro Thr Gly Pro Lys Val			
	290	295	300
Pro Phe Cys Gly Pro Gly Glu Gln Val Pro Gly Pro Asp Ser Leu Thr			
305	310	315	320
Leu Gly Asp Asp Ser Ile Arg Ser Leu Asp Phe Val Ser Glu Pro Ser			
	325	330	335
Leu Asp Leu Pro Asp Tyr Gly Pro Gly Gly Leu His Ala Ala Tyr Pro			
	340	345	350
Pro Ser Pro Pro Leu Ser Ala Ser Asp Ala Phe Ser Gly Ala Leu Arg			
	355	360	365
Ser Leu Ser Leu Lys Ala Ser Ser Arg Arg Gly Gly Asp His Val Ala			
	370	375	380
Leu Gln Pro Leu Arg Ser Glu Gly Gly Pro Pro Thr Pro His Arg Ser			
385	390	395	400
Ile Phe Ala Pro His Ala Leu Pro Asn Arg Asn Gly Ser Leu Ser Tyr			
	405	410	415

Asp Ser Leu Leu Asn Pro Gly Ser Pro Gly Gly His Ala Cys Pro Ala
 420 425 430
 His Pro Ala Val Gly Val Ala Gly Tyr His Ser Pro Tyr Leu His Pro
 435 440 445
 Gly Ala Thr Gly Asp Pro Pro Arg Pro Leu Pro Arg Ser Phe Ser Pro
 450 455 460
 Val Leu Gly Pro Arg Pro Arg Glu Pro Ser Pro Val Arg Tyr Asp Asn
 465 470 475 480

Leu Ser Arg Thr Ile Met Ala Ser Ile Gln Glu Arg Lys Asp Arg Glu
 485 490 495
 Glu Arg Glu Arg Leu Leu Arg Ser Gln Ala Asp Ser Leu Phe Gly Asp
 500 505 510
 Ser Gly Val Tyr Asp Ala Pro Ser Ser Tyr Ser Leu Gln Gln Ala Ser
 515 520 525
 Val Leu Ser Glu Gly Pro Arg Gly Pro Ala Leu Arg Tyr Gly Ser Arg
 530 535 540
 Asp Asp Leu Val Ala Gly Pro Gly Phe Gly Gly Ala Arg Asn Pro Ala
 545 550 555 560
 Leu Gln Thr Ser Leu Ser Ser Leu Ser Ser Ser Val Ser Arg Ala Pro
 565 570 575
 Arg Thr Ser Ser Ser Ser Leu Gln Ala Asp Gln Ala Ser Ser Asn Ala
 580 585 590
 Pro Gly Pro Arg Pro Ser Ser Gly Ser His Arg Ser Pro Ala Arg Gln
 595 600 605
 Gly Leu Pro Ser Pro Pro Gly Thr Pro His Ser Pro Ser Tyr Ala Gly
 610 615 620
 Pro Lys Ala Val Ala Phe Ile His Thr Asp Leu Pro Glu Pro Pro Pro
 625 630 635 640
 Ser Leu Thr Val Gln Arg Gly Arg Ile Gly Thr Cys Thr Arg Gly Trp
 645 650 655
 Gly Arg Arg Gly Gln Pro Trp Val Pro Pro Gly Leu His Leu Cys His
 660 665 670
 Leu Gly Arg Pro Glu Asp Arg Pro Pro Leu Arg Ala Pro Trp Ser Gln
 675 680 685
 Ala Ala Gly Ala Pro Pro Arg Gly Ala Met Cys Arg Leu His Leu Ala

690 695 700
 Ala Ser Ser Leu Phe Pro Ser Leu Ser Gly Pro
 705 710 715

<210> 4717

<211> 851

<212> PRT

<213> Homo sapiens

<400> 4717

Met Ser Val Ser Phe His Thr His Thr Lys Glu Leu Trp Thr Trp Met
 1 5 10 15
 Glu Asp Leu Gln Lys Glu Met Leu Glu Asp Val Cys Ala Asp Ser Val
 20 25 30
 Asp Ala Val Gln Glu Leu Ile Lys Gln Phe Gln Gln Gln Gln Thr Ala
 35 40 45
 Thr Leu Asp Ala Thr Leu Asn Val Ile Lys Glu Gly Glu Asp Leu Ile
 50 55 60
 Gln Gln Leu Arg Asp Ser Ala Val Ser Asn Asn Lys Thr Pro His Ser
 65 70 75 80
 Ser Ser Ile Ser His Ile Glu Ser Val Leu Gln Gln Leu Asp Asp Ala
 85 90 95
 Gln Val Gln Met Glu Glu Leu Phe His Glu Arg Lys Ile Lys Leu Asp
 100 105 110
 Ile Phe Leu Gln Leu Arg Ile Phe Glu Gln Tyr Thr Ile Glu Val Thr
 115 120 125
 Ala Glu Leu Asp Ala Trp Asn Glu Asp Leu Leu Arg Gln Met Asn Asp
 130 135 140
 Phe Asn Thr Glu Asp Leu Thr Leu Ala Glu Gln Arg Leu Gln Arg His
 145 150 155 160
 Thr Glu Arg Lys Leu Ala Met Asn Asn Met Thr Phe Glu Val Ile Gln
 165 170 175
 Gln Gly Gln Asp Leu His Gln Tyr Ile Thr Glu Val Gln Ala Ser Gly
 180 185 190
 Ile Glu Leu Ile Cys Glu Lys Asp Ile Asp Leu Ala Ala Gln Val Gln

195	200	205
Glu Leu Leu Glu Phe Leu His	Glu Lys Gln His Glu Leu Glu Leu Asn	
210	215	220
Ala Glu Gln Thr His Lys Arg Leu Glu Gln Cys Leu Gln Leu Arg His		
225	230	235
240		
Leu Gln Ala Glu Val Lys Gln Val Leu Gly Trp Ile Arg Asn Gly Glu		
245	250	255
Ser Met Leu Asn Ala Ser Leu Val Asn Ala Ser Ser Leu Ser Glu Ala		
260	265	270
Glu Gln Leu Gln Arg Glu His Glu Gln Phe Gln Leu Ala Ile Glu Ser		
275	280	285
Leu Phe His Ala Thr Ser Leu Gln Lys Thr His Gln Ser Ala Leu Gln		
290	295	300
Val Gln Gln Lys Ala Glu Val Leu Leu Gln Ala Gly His Tyr Asp Ala		
305	310	315
320		
Asp Ala Ile Arg Glu Cys Ala Glu Lys Val Ala Leu His Trp Gln Gln		
325	330	335
Leu Met Leu Lys Met Glu Asp Arg Leu Lys Leu Val Asn Ala Ser Val		
340	345	350
Ala Phe Tyr Lys Thr Ser Glu Gln Val Cys Ser Val Leu Glu Ser Leu		
355	360	365
Glu Gln Glu Tyr Arg Arg Asp Glu Asp Trp Cys Gly Gly Arg Asp Lys		
370	375	380
Leu Gly Pro Ala Ala Glu Ile Asp His Val Ile Pro Leu Ile Ser Lys		
385	390	395
400		
His Leu Glu Gln Lys Glu Ala Phe Leu Lys Ala Cys Thr Leu Ala Arg		
405	410	415
Arg Asn Ala Glu Val Phe Leu Lys Tyr Ile His Arg Asn Asn Val Ser		
420	425	430
Met Pro Ser Val Ala Ser His Thr Arg Gly Pro Glu Gln Gln Val Lys		
435	440	445
Ala Ile Leu Ser Glu Leu Leu Gln Arg Glu Asn Arg Val Leu His Phe		
450	455	460
Trp Thr Leu Lys Lys Arg Arg Leu Asp Gln Cys Gln Gln Tyr Val Val		
465	470	475
480		
Phe Glu Arg Ser Ala Lys Gln Ala Leu Asp Trp Ile Gln Glu Thr Gly		

	485	490	495
Glu Phe Tyr Leu Ser Thr His Thr Ser Thr Gly Glu Thr Thr Glu Glu			
500	505	510	
Thr Gln Glu Leu Leu Lys Glu Tyr Gly Glu Phe Arg Val Pro Ala Lys			
515	520	525	
Gln Thr Lys Glu Lys Val Lys Leu Leu Ile Gln Leu Ala Asp Ser Phe			
530	535	540	
Val Glu Lys Gly His Ile His Ala Thr Glu Ile Arg Lys Trp Val Thr			
545	550	555	560
Thr Val Asp Lys His Tyr Arg Asp Phe Ser Leu Arg Met Gly Lys Tyr			
565	570	575	
Arg Tyr Ser Leu Glu Lys Ala Leu Gly Val Asn Thr Glu Asp Asn Lys			
580	585	590	
Asp Leu Glu Leu Asp Ile Ile Pro Ala Ser Leu Ser Asp Arg Glu Val			
595	600	605	
Lys Leu Arg Asp Ala Asn His Glu Val Asn Glu Glu Lys Arg Lys Ser			
610	615	620	
Ala Arg Lys Lys Glu Phe Ile Met Ala Glu Leu Leu Gln Thr Glu Lys			
625	630	635	640
Ala Tyr Val Arg Asp Leu His Glu Cys Leu Glu Thr Tyr Leu Trp Glu			
645	650	655	
Met Thr Ser Gly Val Glu Glu Ile Pro Pro Gly Ile Leu Asn Lys Glu			
660	665	670	
His Ile Ile Phe Gly Asn Ile Gln Glu Ile Tyr Asp Phe His Asn Asn			
675	680	685	
Ile Phe Leu Lys Glu Leu Glu Lys Tyr Glu Gln Leu Pro Glu Asp Val			
690	695	700	
Gly His Cys Phe Val Thr Trp Ala Asp Lys Phe Gln Met Tyr Val Thr			
705	710	715	720
Tyr Cys Lys Asn Lys Pro Asp Ser Asn Gln Leu Ile Leu Glu His Ala			
725	730	735	
Gly Thr Phe Phe Asp Glu Ile Gln Gln Arg His Gly Leu Ala Asn Ser			
740	745	750	
Ile Ser Ser Tyr Leu Ile Lys Pro Val Gln Arg Ile Thr Lys Tyr Gln			
755	760	765	
Leu Leu Leu Lys Glu Leu Leu Thr Cys Cys Glu Glu Gly Lys Gly Glu			

770 775 780
 Leu Lys Asp Gly Leu Glu Val Met Leu Ser Val Pro Lys Lys Ala Asn
 785 790 795 800
 Asp Ala Met His Val Ser Met Leu Glu Gly Ser Cys Pro Pro Ser Thr
 805 810 815
 Gly Glu Ala Ser Ser Leu Pro Arg His Gly Gly Ala Cys Ile Met Gly
 820 825 830
 Gly Lys Trp His Glu Val Arg Gln Gly Ala Arg Leu Glu Glu Arg Arg
 835 840 845
 Asn Asp Lys
 850

<210> 4718

<211> 312

<212> PRT

<213> Homo sapiens

<400> 4718

Met Ile Ala Val Gly Ser Met Asp Tyr Gly Leu Trp Gln Leu Phe Cys
 1 5 10 15
 Thr Leu Glu Leu Pro Leu Ile Pro Ile Leu Ala Val Met Glu Ser His
 20 25 30
 Ala Ile Gln Val Asn Lys Glu Glu Met Glu Lys Thr Ser Ala Leu Leu
 35 40 45
 Gly Ala Arg Leu Lys Glu Leu Glu Gln Glu Ala His Phe Val Ala Gly
 50 55 60
 Glu Arg Phe Leu Ile Thr Ser Asn Asn Gln Leu Arg Glu Ile Leu Phe
 65 70 75 80
 Gly Lys Leu Lys Leu His Leu Leu Ser Gln Arg Asn Ser Leu Pro Arg
 85 90 95
 Thr Gly Leu Gln Lys Tyr Pro Ser Thr Ser Glu Ala Val Asn Ile Gln
 100 105 110
 Gly Ile Ser Lys His Pro Ile Gln Ile Thr Thr Pro Lys Asn Phe Lys
 115 120 125
 Gly Lys Glu Asp Lys Ile Leu Thr Ile Ser Pro Arg Ala Met Phe Val

130	135	140	
Ser Ser Lys Gly His Thr Phe Leu Ala Ala Asp Phe Ser Gln Ile Glu			
145	150	155	160
Leu Arg Ile Leu Thr His Leu Ser Gly Asp Pro Glu Leu Leu Lys Leu			
	165	170	175
Phe Gln Glu Ser Glu Arg Asp Asp Val Phe Ser Thr Leu Thr Ser Gln			
	180	185	190
Trp Lys Asp Val Pro Val Glu Gln Val Thr His Ala Asp Arg Glu Gln			
	195	200	205
Thr Lys Lys Val Val Tyr Ala Val Val Tyr Gly Ala Gly Lys Glu Arg			
210	215	220	
Leu Ala Ala Cys Leu Gly Val Pro Ile Gln Glu Ala Ala Gln Phe Leu			
225	230	235	240
Glu Ser Phe Leu Gln Lys Tyr Lys Lys Ile Lys Asp Phe Ala Arg Ala			
	245	250	255
Ala Ile Ala Gln Cys His Gln Thr Gly Cys Val Val Ser Ile Met Gly			
	260	265	270
Arg Arg Arg Pro Leu Pro Arg Ile His Ala His Asp Gln Gln Leu Arg			
	275	280	285
Ala Gln Ala Glu Arg Gln Ala Val Asn Phe Val Val Gln Ala Gln Ser			
	290	295	300
Gln His Leu Cys Val Glu Val Pro			
305	310		

<210> 4719

<211> 123

<212> PRT

<213> Homo sapiens

<400> 4719

Met Pro Gly Pro Pro Gly Ser Leu Glu Met Gly Pro Leu Thr Phe Arg			
1	5	10	15
Asp Val Ala Ile Glu Phe Ser Leu Glu Glu Trp Gln Cys Leu Asp Thr			
	20	25	30
Ala Gln Arg Asn Leu Tyr Arg Lys Val Met Phe Glu Asn Tyr Arg Asn			

35 40 45
 Leu Val Phe Leu Gly Ile Ala Val Ser Lys Pro His Leu Ile Thr Cys
 50 55 60
 Leu Glu Gln Gly Lys Glu Pro Trp Asn Arg Lys Arg Gln Glu Met Val
 65 70 75 80
 Ala Lys Pro Pro Glu Ser Tyr Cys Val Ala Gln Ala Asp Leu Glu Leu
 85 90 95
 Leu Val Ser Ser Tyr Leu Thr Ala Leu Ala Ser Leu Lys Met Trp Asp
 100 105 110
 Tyr Arg Asn Asn Pro Leu Cys Gln Ala Thr Met
 115 120

<210> 4720

<211> 301

<212> PRT

<213> Homo sapiens

<400> 4720

Met Ala Val Arg Pro Gly Leu Trp Pro Ala Leu Leu Gly Ile Val Leu
 1 5 10 15
 Ala Ala Trp Leu Arg Gly Ser Gly Ala Gln Gln Ser Ala Thr Val Ala
 20 25 30
 Asn Pro Val Pro Gly Ala Asn Pro Asp Leu Leu Pro His Phe Leu Val
 35 40 45
 Glu Pro Glu Asp Val Tyr Ile Val Lys Asn Lys Pro Val Leu Leu Val
 50 55 60
 Cys Lys Ala Val Pro Ala Thr Gln Ile Phe Phe Lys Cys Asn Gly Glu
 65 70 75 80
 Trp Val Arg Gln Val Asp His Val Ile Glu Arg Ser Thr Asp Gly Ser
 85 90 95
 Asn Gly Leu Pro Thr Met Glu Val Arg Ile Asn Val Ser Arg Gln Gln
 100 105 110
 Val Glu Lys Val Phe Gly Leu Glu Glu Tyr Trp Cys Gln Cys Val Ala
 115 120 125
 Trp Ser Ser Ser Gly Thr Thr Lys Ser Gln Lys Ala Tyr Ile Arg Ile

130	135	140
Ala Tyr Leu Arg Lys Asn Phe Glu Gln Glu Pro Leu Ala Lys Glu Val		
145	150	155
Ser Leu Glu Gln Gly Ile Val Leu Pro Cys Arg Pro Pro Glu Gly Ile		
165	170	175
Pro Pro Ala Glu Val Glu Trp Leu Arg Asn Glu Asp Leu Val Asp Pro		
180	185	190
Ser Leu Asp Pro Asn Val Tyr Ile Thr Arg Glu His Ser Leu Val Val		
195	200	205
Arg Gln Ala Arg Leu Ala Asp Thr Ala Asn Tyr Thr Cys Val Ala Lys		
210	215	220
Asn Ile Val Ala Arg Arg Arg Ser Ala Ser Ala Ala Val Ile Val Tyr		
225	230	235
Val Asp Gly Ser Trp Ser Pro Trp Ser Lys Trp Ser Ala Cys Gly Leu		
245	250	255
Asp Cys Thr His Trp Arg Ser Arg Glu Cys Ser Asp Pro Ala Pro Arg		
260	265	270
Asn Gly Gly Glu Glu Cys Gln Gly Thr Asp Leu Asp Thr Arg Asn Cys		
275	280	285
Thr Ser Asp Leu Cys Val His Ser Glu Ser Ser Leu Pro		
290	295	300

<210> 4721

<211> 101

<212> PRT

<213> Homo sapiens

<400> 4721

Met Leu Arg Glu Val Cys Val Cys Val Cys Val Cys Val Cys Val Cys
1 5 10 15
Pro Leu Cys Thr Glu Ala Ala Val Arg Asp Val Thr Asn Leu Asn Leu
20 25 30
Pro Glu Ser Trp Arg Phe Thr Phe Cys Lys Gly Arg Gly His Ser Trp
35 40 45

Thr Val Thr Ile Pro Ile Leu Val Arg Val Ala Gly Thr Glu Gln Ser
 50 55 60
 His Gln His Ala Lys Val His Leu Gln Ser Ser Met His Ala Pro Arg
 65 70 75 80
 Lys Pro Pro Val Gly Tyr Ala Ser Cys Thr Phe Pro Phe Ser Leu Thr
 85 90 95
 Ser Val Ser Cys Leu
 100

<210> 4722

<211> 116

<212> PRT

<213> Homo sapiens

<400> 4722

Met Thr Phe Arg Ser Gly Gly Gly Asp Ala Leu Gly Lys Ala Ala Cys
 1 5 10 15
 Leu Val Pro Ala Ala Ser Arg Pro Gln Ser Pro Ile Leu Gln Met Thr
 20 25 30
 Ser Arg Glu Val Thr Pro Gln Val Gly Asn Arg Ala Gly Phe Gly Ile
 35 40 45
 Arg Val Cys Leu Phe Pro Pro Arg Asp Pro Glu Ser Trp Gln Pro Val
 50 55 60
 Ser Lys Leu Leu Tyr Val His His Thr Ser Gly Phe Arg Phe Ile Gly
 65 70 75 80
 Val Phe Leu Lys Leu Arg Leu Val Ser Val Gln Leu Leu Leu Val Arg
 85 90 95
 His Leu Ser Tyr Thr Arg His Cys Pro Trp Cys Trp Arg His Ser Asn
 100 105 110
 Glu Glu Asp Arg
 115

<210> 4723

<211> 166

<212> PRT

<213> Homo sapiens

<400> 4723

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Met Arg His Thr Ser Lys Arg Lys Pro Gln Tyr Tyr Glu Ala Glu Met
  1             5             10             15
Val Leu Lys Tyr Tyr Lys His Leu Glu Glu Gly Ser Val Ser Leu Cys
      20             25             30
Cys Pro Gly Trp Ser Ala Val Ala Gln Ser Arg Leu Thr Ala Ala Ser
      35             40             45
Thr Phe Gly Ala Gln Val Ile Leu Leu Phe Gln Leu Ser Glu Gln Leu
      50             55             60
Arg Leu Gln Glu Leu Lys Leu Pro Thr Phe Arg Ala His Ser Pro Leu
      65             70             75             80
Leu Lys Ser Arg Arg Phe Phe Val Asp Ile Leu Thr Leu Leu Ser Ser
      85             90             95
His Cys Gln Leu Cys Pro Ala Ala Arg His Leu Ala Val Tyr Leu Leu
      100            105            110
Asp His Phe Met Asp Arg Tyr Asn Val Thr Thr Ser Lys Gln Leu Tyr
      115            120            125
Thr Val Ala Val Ser Cys Leu Leu Leu Ala Ser Arg Asn Lys Gly Ser
      130            135            140
Gly Ser Pro Val Pro Thr Arg Ser Ala Gln Gln Cys Arg Gln Thr Trp
      145            150            155            160
Ala Arg Gly Ser Pro Trp
      165

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<210> 4724

<211> 165

<212> PRT

<213> Homo sapiens

<400> 4724

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Met Leu Phe Phe Asn Lys Lys Asn Phe Phe Asn His Gly Leu Ser Gly

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1 5 10 15
 Phe Ser Cys Pro Leu Asp Thr Phe Leu Cys Leu Ser Leu Ser Leu Phe
 20 25 30
 Pro Ala Leu His Arg Gly Pro Pro Gly Ser Arg Gly Pro Leu Ile Pro
 35 40 45
 Pro Leu Leu Ser Leu Pro Pro Pro Pro Trp Gly Arg Gly Pro Ile Arg
 50 55 60
 Arg Gly Leu Gly Pro Arg Ser Ser Pro Tyr Gly Arg Gly Trp Trp Gly
 65 70 75 80
 Val Asn Ala Glu Pro Pro Phe Pro Gly Pro Gly His Gly Gly Pro Thr
 85 90 95
 Arg Gly Ser Phe His Lys Glu Gln Arg Asn Pro Arg Arg Leu Lys Ser
 100 105 110
 Trp Ser Leu Ile Lys Asn Thr Cys Pro Pro Lys Asp Asp Pro Gln Val
 115 120 125
 Met Glu Asp Lys Ser Asp Arg Pro Val Cys Arg His Phe Ala Lys Lys
 130 135 140
 Gly His Cys Arg Tyr Glu Asp Leu Cys Ala Phe Tyr His Pro Gly Val
 145 150 155 160
 Asn Gly Pro Pro Leu
 165

<210> 4725

<211> 141

<212> PRT

<213> Homo sapiens

<400> 4725

Met Arg Asp Asn Ile Ile Ile Ser Gly Ser Thr Asp Arg Thr Leu Lys
 1 5 10 15
 Val Trp Asn Ala Glu Thr Gly Glu Cys Ile His Thr Leu Tyr Gly His
 20 25 30
 Thr Ser Thr Val Arg Cys Met His Leu His Glu Lys Arg Val Val Ser
 35 40 45
 Gly Ser Arg Asp Ala Thr Leu Arg Val Trp Asp Ile Glu Thr Gly Gln

50 55 60
 Cys Leu His Val Leu Met Gly His Val Ala Ala Val Arg Cys Val Gln
 65 70 75 80
 Tyr Asp Gly Arg Arg Val Val Ser Gly Ala Tyr Asp Phe Met Val Lys
 85 90 95
 Ala Trp Asp Pro Glu Thr Glu Thr Cys Leu His Thr Leu Gln Gly His
 100 105 110
 Thr Asn Arg Val Tyr Ser Leu Gln Val Arg Ser Leu Ile Ser Pro Leu
 115 120 125
 Asn Ala Leu Leu Met Asn His Lys Val Val Leu Leu Arg
 130 135 140

<210> 4726

<211> 326

<212> PRT

<213> Homo sapiens

<400> 4726

Met Asp Ala Ile Lys Lys Lys Met Gln Met Leu Lys Leu Asp Lys Glu
 1 5 10 15
 Asn Ala Leu Asp Arg Ala Glu Gln Ala Glu Ala Asp Lys Lys Ala Ala
 20 25 30
 Glu Asp Arg Ser Lys Gln Leu Glu Glu Asp Ile Ala Ala Lys Glu Lys
 35 40 45
 Leu Leu Arg Val Ser Glu Asp Glu Arg Asp Arg Val Leu Glu Glu Leu
 50 55 60
 His Lys Ala Glu Asp Ser Leu Leu Ala Ala Glu Glu Ala Ala Ala Lys
 65 70 75 80
 Leu Glu Asp Glu Leu Val Ser Leu Gln Lys Lys Leu Lys Gly Thr Glu
 85 90 95
 Asp Glu Leu Asp Lys Tyr Ser Glu Ala Leu Lys Asp Ala Gln Glu Lys
 100 105 110
 Leu Glu Leu Ala Glu Lys Lys Ala Thr Asp Ala Glu Ala Asp Val Ala
 115 120 125
 Ser Leu Asn Arg Arg Ile Gln Leu Val Glu Glu Glu Leu Asp Arg Ala

130	135	140	
Gln Glu Arg Leu Ala Thr Ala Leu Gln Lys Leu Glu Glu Ala Glu Lys			
145	150	155	160
Ala Ala Asp Glu Ser Glu Arg Gly Met Lys Val Ile Glu Ser Arg Ala			
	165	170	175
Gln Lys Asp Glu Glu Lys Met Glu Ile Gln Glu Ile Gln Leu Lys Glu			
	180	185	190
Ala Lys His Ile Ala Glu Asp Ala Asp Arg Lys Tyr Glu Glu Val Ala			
	195	200	205
Arg Lys Leu Val Ile Ile Glu Ser Asp Leu Glu Arg Ala Glu Glu Arg			
210	215	220	
Ala Glu Leu Ser Glu Gly Lys Cys Ala Glu Leu Glu Glu Glu Leu Lys			
225	230	235	240
Thr Val Thr Asn Asn Leu Lys Ser Leu Glu Ala Gln Ala Glu Lys Tyr			
	245	250	255
Ser Gln Lys Glu Asp Arg Tyr Glu Glu Glu Ile Lys Val Leu Ser Asp			
	260	265	270
Lys Leu Lys Glu Ala Glu Thr Arg Ala Glu Phe Ala Glu Arg Ser Val			
	275	280	285
Thr Lys Leu Glu Lys Ser Ile Asp Asp Leu Glu Glu Lys Val Ala His			
290	295	300	
Ala Lys Glu Glu Asn Leu Ser Met His Gln Met Leu Asp Gln Thr Leu			
305	310	315	320
Leu Glu Leu Asn Asn Met			
	325		

<210> 4727

<211> 268

<212> PRT

<213> Homo sapiens

<400> 4727

Met Ala Ala Ala Thr Gly Ala Val Ala Ala Ser Ala Ala Ser Gly Gln
1 5 10 15
Ala Glu Gly Lys Lys Ile Thr Asp Leu Arg Val Ile Asp Leu Lys Ser

	20		25		30										
Glu	Leu	Lys	Arg	Arg	Asn	Leu	Asp	Ile	Thr	Gly	Val	Lys	Thr	Val	Leu
	35					40						45			
Ile	Ser	Arg	Leu	Lys	Gln	Ala	Ile	Glu	Glu	Glu	Gly	Gly	Asp	Pro	Asp
	50					55						60			
Asn	Ile	Glu	Leu	Thr	Val	Ser	Thr	Gly	Thr	Pro	Asn	Lys	Lys	Pro	Thr
	65				70					75				80	
Lys	Gly	Lys	Gly	Lys	Lys	His	Glu	Ala	Asp	Glu	Leu	Ser	Gly	Asp	Ala
			85						90					95	
Ser	Val	Glu	Asp	Asp	Ala	Phe	Ile	Lys	Asp	Gly	Glu	Glu	Glu	Glu	Asn
	100							105					110		
Glu	Lys	Gly	Ser	Leu	Ala	Glu	Ala	Asp	His	Thr	Ala	His	Glu	Glu	Met
	115						120					125			
Glu	Ala	His	Thr	Thr	Val	Lys	Glu	Ala	Glu	Asp	Asp	Asn	Ile	Ser	Val
	130					135						140			
Thr	Ile	Gln	Ala	Glu	Asp	Ala	Ile	Thr	Leu	Asp	Phe	Asp	Gly	Asp	Asp
	145				150					155				160	
Leu	Leu	Glu	Thr	Gly	Lys	Asn	Val	Lys	Ile	Thr	Asp	Ser	Glu	Ala	Ser
			165					170					175		
Lys	Pro	Lys	Asp	Gly	Gln	Asp	Ala	Ile	Ala	Gln	Ser	Pro	Glu	Lys	Glu
	180						185					190			
Ser	Lys	Asp	Tyr	Glu	Met	Asn	Ala	Asn	His	Lys	Asp	Gly	Lys	Lys	Glu
	195					200						205			
Asp	Cys	Val	Lys	Gly	Asp	Pro	Val	Glu	Lys	Glu	Ala	Arg	Glu	Ser	Ser
	210					215					220				
Lys	Lys	Ala	Glu	Ser	Gly	Asp	Lys	Glu	Lys	Asp	Thr	Leu	Lys	Lys	Gly
	225				230					235				240	
Pro	Ser	Ser	Thr	Gly	Ala	Ser	Gly	Gln	Ala	Lys	Arg	Phe	Val	Phe	Leu
			245					250					255		
Cys	Gln	Phe	Phe	Thr	Ile	Leu	Asn	Ser	Ser	Ile	Gln				
	260						265								

<210> 4728

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4728

Met Thr Thr His Leu Tyr Asp Ala Pro Thr Val Lys Phe Leu Thr Pro
 1 5 10 15
 Cys Tyr His Pro Asn Val Asp Thr Gln Gly Asn Ile Cys Leu Asp Ile
 20 25 30
 Leu Lys Glu Lys Trp Ser Ala Pro Tyr Asp Ile Arg Thr Ile Leu Leu
 35 40 45
 Ser Ile Gln Cys Leu Leu Gly Gln Leu Asn Ile Asp Ser Pro Leu Asn
 50 55 60

Thr His Ala Thr Lys Leu Trp Glu Asn Pro Ile Ala Leu Arg Ser Thr
 65 70 75 80
 Cys Lys Gly Gln Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp
 85 90 95
 Glu Ala Glu Val Gly Gly Trp Ile Thr
 100 105

<210> 4729

<211> 336

<212> PRT

<213> Homo sapiens

<400> 4729

Met Lys Glu Arg Lys Arg His Leu Gly Asp Thr Lys His Phe Cys Pro
 1 5 10 15
 Val Val Leu Lys Glu Asn Phe Ile Leu Gln Pro Gly Asn Thr Glu Glu
 20 25 30
 Ala Ala Lys Tyr Arg Glu Lys Ile Tyr Tyr Phe Ser Ser Ala Glu Ala
 35 40 45
 Lys Glu Lys Phe Leu Glu His Pro Glu Asp Tyr Val Ala His Glu Glu
 50 55 60
 Pro Leu Lys Ala Pro Pro Leu Arg Ile Cys Leu Val Gly Pro Gln Gly
 65 70 75 80

Ser Gly Lys Thr Met Cys Gly Arg Gln Leu Ala Glu Lys Leu Asn Ile
 85 90 95
 Phe His Ile Gln Phe Glu Glu Val Leu Gln Glu Lys Leu Leu Leu Lys
 100 105 110
 Thr Glu Lys Lys Val Gly Pro Glu Phe Glu Glu Asp Ser Glu Asn Glu
 115 120 125
 Gln Ala Ala Lys Gln Glu Leu Glu Glu Leu Ala Ile Gln Ala Asn Val
 130 135 140
 Lys Val Glu Glu Glu Asn Thr Lys Lys Gln Leu Pro Glu Val Gln Leu
 145 150 155 160
 Thr Glu Glu Glu Glu Val Ile Lys Ser Ser Leu Met Glu Asn Glu Pro
 165 170 175
 Leu Pro Pro Glu Ile Leu Glu Val Ile Leu Ser Glu Trp Trp Leu Lys
 180 185 190
 Glu Pro Ile Arg Ser Thr Gly Phe Ile Leu Asp Gly Phe Pro Arg Tyr
 195 200 205
 Pro Glu Glu Ala Gln Phe Leu Gly Asp Arg Gly Phe Phe Pro Asp Ala
 210 215 220
 Ala Val Phe Ile Gln Val Asp Asp Gln Asp Ile Phe Asp Arg Leu Leu
 225 230 235 240
 Pro Ala Gln Ile Glu Lys Trp Lys Leu Lys Gln Lys Lys Lys Leu Glu
 245 250 255
 Arg Lys Lys Leu Ile Lys Asp Met Lys Ala Lys Ile Arg Val Asp Thr
 260 265 270
 Ile Ala Lys Arg Arg Ala Glu Leu Ile Leu Glu Arg Asp Lys Lys Arg
 275 280 285
 Arg Glu Val Ser Ser Phe Val Phe Phe Phe Lys Thr Gly Ser His Ser
 290 295 300
 Val Ala Gln Gly Arg Val Gln Trp His Asn His Ser Ser Leu Gln Pro
 305 310 315 320
 Arg Thr Pro Gly Leu Lys Gly Ser Ser His Leu Ser Leu Ser Lys Cys
 325 330 335

<210> 4730

<211> 438

<212> PRT

<213> Homo sapiens

<400> 4730

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Met His Pro Leu Pro Gly Tyr Trp Ser Cys Tyr Cys Leu Leu Leu Leu
  1             5             10             15
Phe Ser Leu Gly Val Gln Gly Ser Leu Gly Ala Pro Ser Ala Ala Pro
      20             25             30
Glu Gln Val His Leu Ser Tyr Pro Gly Glu Pro Gly Ser Met Thr Val
      35             40             45
Thr Trp Thr Thr Trp Val Pro Thr Arg Ser Glu Val Gln Phe Gly Leu
      50             55             60
Gln Pro Ser Gly Pro Leu Pro Leu Arg Ala Gln Gly Thr Phe Val Pro
      65             70             75             80
Phe Val Asp Gly Gly Ile Leu Arg Arg Lys Leu Tyr Ile His Arg Val
      85             90             95
Thr Leu Arg Lys Leu Leu Pro Gly Val Gln Tyr Val Tyr Arg Cys Gly
      100            105            110
Ser Ala Gln Gly Trp Ser Arg Arg Phe Arg Phe Arg Ala Leu Lys Asn
      115            120            125
Gly Ala His Trp Ser Pro Arg Leu Ala Val Phe Gly Asp Leu Gly Ala
      130            135            140
Asp Asn Pro Lys Ala Val Pro Arg Leu Arg Arg Asp Thr Gln Gln Gly
      145            150            155            160
Met Tyr Asp Ala Val Leu His Val Gly Asp Phe Ala Tyr Asn Leu Asp
      165            170            175
Gln Asp Asn Ala Arg Val Gly Asp Arg Phe Met Arg Leu Ile Glu Pro
      180            185            190
Val Ala Ala Ser Leu Pro Tyr Met Thr Cys Pro Gly Asn His Glu Glu
      195            200            205
Arg Tyr Asn Phe Ser Asn Tyr Lys Ala Arg Phe Ser Met Pro Gly Asp
      210            215            220
Asn Glu Gly Leu Trp Tyr Ser Trp Asp Leu Gly Pro Ala His Ile Ile
      225            230            235            240
Ser Phe Ser Thr Glu Val Tyr Phe Phe Leu His Tyr Gly Arg His Leu
      245            250            255

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Val Gln Arg Gln Phe Arg Trp Leu Glu Ser Asp Leu Gln Lys Ala Asn
 260 265 270
 Lys Asn Arg Ala Ala Arg Pro Trp Ile Ile Thr Met Gly His Arg Pro
 275 280 285
 Met Tyr Cys Ser Asn Ala Asp Leu Asp Asp Cys Thr Arg His Glu Ser
 290 295 300
 Lys Val Arg Lys Gly Leu Gln Gly Lys Leu Tyr Gly Leu Glu Asp Leu
 305 310 315 320
 Phe Tyr Lys Tyr Gly Val Asp Leu Gln Leu Trp Ala His Glu His Ser
 325 330 335
 Tyr Glu Arg Leu Trp Pro Ile Tyr Asn Tyr Gln Val Phe Asn Gly Ser
 340 345 350
 Arg Glu Met Pro Tyr Thr Asn Pro Arg Gly Pro Val His Ile Ile Thr
 355 360 365
 Gly Ser Ala Gly Cys Glu Glu Arg Leu Thr Pro Phe Ala Val Phe Pro
 370 375 380
 Arg Pro Trp Ser Ala Val Arg Val Lys Glu Tyr Gly Tyr Thr Arg Leu
 385 390 395 400
 His Ile Leu Asn Gly Thr His Thr His Ile Gln Gln Val Ser Asp Asp
 405 410 415
 Gln Asp Gly Lys Ile Val Asp Asp Val Trp Val Val Arg Pro Leu Phe
 420 425 430
 Gly Arg Arg Met Tyr Leu
 435

<210> 4731

<211> 607

<212> PRT

<213> Homo sapiens

<400> 4731

Met Ala Glu Glu Gly Ala Ile Leu Lys Val Thr Lys Asp Leu Arg Ala
 1 5 10 15
 Ala Val Ser Ala Ile Leu Gln Gly Tyr Gly Asp Gly Gln Gly Pro Val
 20 25 30

Thr Asp Thr Ser Ala Glu Leu His Arg Leu Cys Gly Cys Leu Glu Leu
 35 40 45
 Leu Leu Gln Phe Asp Gln Lys Glu Gln Lys Ser Phe Leu Gly Pro Arg
 50 55 60
 Lys Asp Tyr Trp Asp Phe Leu Cys Thr Ala Leu Arg Arg Gln Arg Gly
 65 70 75 80
 Asn Met Glu Pro Ile His Phe Val Arg Ser Gln Asp Lys Leu Lys Thr
 85 90 95
 Pro Leu Gly Lys Gly Arg Ala Phe Ile Arg Phe Cys Leu Ala Arg Gly
 100 105 110
 Gln Leu Ala Glu Ala Leu Gln Leu Cys Leu Leu Asn Ser Glu Leu Thr
 115 120 125
 Arg Glu Trp Tyr Gly Pro Arg Ser Pro Leu Leu Cys Pro Glu Arg Gln
 130 135 140
 Glu Asp Ile Leu Asp Ser Leu Tyr Ala Leu Asn Gly Val Ala Phe Glu
 145 150 155 160
 Leu Asp Leu Gln Gln Pro Asp Leu Asp Gly Ala Trp Pro Met Phe Ser
 165 170 175
 Glu Ser Arg Cys Ser Ser Ser Thr Gln Thr Gln Gly Arg Arg Pro Arg
 180 185 190
 Lys Asn Lys Asp Ala Pro Lys Lys Val Pro Leu Pro Cys Leu His Ser
 195 200 205
 Glu Leu Pro Leu Pro His Leu Leu Gly Ile Leu Lys Ile Pro Ala Ala
 210 215 220
 Tyr Gly Gly Pro Glu Asn Val Gln Ile Glu Asp Ser His Thr Ser Gln
 225 230 235 240
 Ala Ile Cys Leu Gln Asp Ala Pro Ser Gly Gln Gln Leu Ala Gly Leu
 245 250 255
 Pro Arg Ser Gln Gln Gln Arg His Leu Pro Phe Phe Leu Glu Lys Lys
 260 265 270
 Gly Glu Ser Ser Arg Lys His Arg Tyr Pro Gln Ser Met Trp Glu Pro
 275 280 285
 Glu Gly Lys Glu Leu Gln Leu Asp Gln Glu Glu Arg Ala Pro Trp Ile
 290 295 300
 Glu Ile Phe Leu Gly Asn Ser Thr Pro Ser Thr Gln Gly Gln Gly Lys
 305 310 315 320

Gly Ala Met Gly Thr Gln Lys Glu Val Ile Gly Met Glu Ala Glu Val
 325 330 335
 Thr Gly Val Leu Leu Val Ala Glu Gly Gln Arg Thr Thr Glu Gly Thr
 340 345 350
 His Lys Lys Glu Ala Glu Trp Ser His Val Gln Arg Leu Leu Met Pro
 355 360 365
 Ser Pro Arg Gly Ala Val Glu Gly Ala Val Ser Gly Ser Arg Gln Gly
 370 375 380
 Ser Gly Gly Ser Ser Ile Leu Gly Glu Pro Trp Val Leu Gln Gly His
 385 390 395 400
 Ala Thr Lys Glu Asp Ser Thr Val Glu Asn Pro Gln Val Gln Thr Glu
 405 410 415
 Val Thr Leu Val Ala Arg Arg Glu Glu Gln Ala Glu Val Ser Leu Gln
 420 425 430
 Asp Glu Ile Lys Ser Leu Arg Leu Gly Leu Arg Lys Ala Glu Glu Gln
 435 440 445
 Ala Gln Arg Gln Glu Gln Leu Leu Arg Glu Gln Glu Gly Glu Leu Gln
 450 455 460
 Ala Leu Arg Glu Gln Leu Ser Arg Cys Gln Glu Glu Arg Ala Glu Leu
 465 470 475 480
 Gln Ala Gln Leu Glu Gln Lys Gln Gln Glu Ala Glu Arg Arg Asp Ala
 485 490 495
 Met Tyr Gln Glu Glu Leu Gly Gly Gln Arg Asp Leu Val Gln Ala Met
 500 505 510
 Lys Arg Arg Val Leu Glu Leu Ile Gln Glu Lys Asp Arg Leu Trp Gln
 515 520 525
 Arg Leu Gln His Leu Ser Ser Met Ala Pro Glu Cys Cys Val Ala Cys
 530 535 540
 Ser Lys Ile Phe Gly Arg Phe Ser Arg Arg Tyr Pro Cys Ser Ala Arg
 545 550 555 560
 Thr Ser Leu Gly Arg Glu Glu Ser Glu Pro Pro Gly Glu Ala Ala Met
 565 570 575

 Trp Arg Trp Arg Leu Trp Arg Gly Arg Ala Ser Gly His Pro Ser Gly
 580 585 590
 Glu Gly Arg Pro Pro Glu Thr Asn Gln Gly His Ser Thr Gly Arg

595

600

605

<210> 4732

<211> 148

<212> PRT

<213> Homo sapiens

<400> 4732

Met Ser Cys Asn Leu Ala Ser Leu Cys Ser Lys Val Leu Glu Gln Gly

1 5 10 15

Ala Tyr His Pro Ile Leu Ile Pro Ser Pro Leu Ser Pro Pro Trp Thr

20 25 30

His Cys Ala Gln His Leu Arg Pro Cys Thr Cys Lys Gly Ser Ser His

35 40 45

Tyr Gly Asp Gln Gln Pro Arg Ser Gln Val Leu Asn Ser Lys Met Leu

50 55 60

Leu Ser Ala Ser Val Leu Asp Leu Ser Ser Val Asp Ser Asp Ala Phe

65 70 75 80

Glu Ile Leu Leu Ser Leu Ala Ser Ile Ala Ile Arg Thr Pro Arg Val

85 90 95

Cys His Pro Leu Leu Pro Leu His Phe Ile Leu Leu His Lys Gly Gln

100 105 110

Pro Ser His Val Glu Val Leu Trp Asp Ala Ala Trp Leu Phe Phe Ile

115 120 125

Val Asp Leu Met Phe Ser Ser Ile Leu Leu Cys Thr Phe Leu Arg Leu

130 135 140

Gln Tyr Phe Val

145

<210> 4733

<211> 392

<212> PRT

<213> Homo sapiens

<400> 4733

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Met Gln Pro Leu Thr Lys Asp Ala Gly Met Ser Leu Ser Ser Val Thr
  1             5             10             15
Leu Ala Ser Ala Leu Gln Val Arg Gly Glu Ala Leu Ser Glu Glu Glu
      20             25             30
Ile Trp Ser Leu Leu Phe Leu Ala Ala Glu Gln Leu Leu Glu Asp Leu
      35             40             45
Arg Asn Asp Ser Ser Asp Tyr Val Val Cys Pro Trp Ser Ala Leu Leu
      50             55             60
Ser Ala Ala Gly Ser Leu Ser Phe Gln Gly Arg Val Ser His Ile Glu
      65             70             75             80
Ala Ala Pro Phe Lys Ala Pro Glu Leu Leu Gln Gly Gln Ser Glu Asp
      85             90             95
Glu Gln Pro Asp Ala Ser Gln Met His Val Tyr Ser Leu Gly Met Thr
      100            105            110
Leu Tyr Trp Ser Ala Gly Phe His Val Pro Pro His Gln Pro Leu Gln
      115            120            125
Leu Cys Glu Pro Leu His Ser Ile Leu Leu Thr Met Cys Glu Asp Gln
      130            135            140
Pro His Arg Arg Cys Thr Leu Gln Ser Val Leu Glu Ala Cys Arg Val
      145            150            155            160
His Glu Lys Glu Val Ser Val Tyr Pro Ala Pro Ala Gly Leu His Ile
      165            170            175
Arg Arg Leu Val Gly Leu Val Leu Gly Thr Ile Ser Glu Val Glu Lys
      180            185            190
Arg Val Val Glu Glu Ser Ser Ser Val Gln Gln Asn Arg Ser Tyr Leu
      195            200            205
Leu Arg Lys Arg Leu Arg Gly Thr Ser Ser Glu Ser Pro Ala Ala Gln
      210            215            220
Ala Pro Glu Cys Leu His Pro Cys Arg Val Ser Glu Arg Ser Thr Glu
      225            230            235            240
Thr Gln Ser Ser Pro Glu Pro His Trp Ser Thr Leu Thr His Ser His
      245            250            255
Cys Ser Leu Leu Val Asn Arg Ala Leu Pro Gly Ala Asp Pro Gln Asp
      260            265            270

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Gln Gln Ala Gly Arg Arg Leu Ser Ser Gly Ser Val His Ser Ala Ala
 275 280 285
 Asp Ser Ser Trp Pro Thr Thr Pro Ser Gln Arg Gly Phe Leu Gln Arg
 290 295 300
 Arg Ser Lys Phe Ser Arg Pro Glu Phe Ile Leu Leu Ala Gly Glu Ala
 305 310 315 320
 Pro Met Thr Leu His Leu Pro Gly Ser Val Val Thr Lys Lys Gly Lys
 325 330 335
 Ser Tyr Leu Ala Leu Arg Asp Leu Cys Val Val Leu Leu Asn Gly Gln
 340 345 350
 His Leu Glu Val Lys Cys Asp Val Glu Ser Thr Val Gly Ala Val Phe
 355 360 365
 Asn Ala Val Thr Ser Phe Ala Asn Leu Glu Glu Leu Thr Tyr Phe Gly
 370 375 380
 Leu Ala Tyr Met Lys Ser Gly Glu
 385 390

<210> 4734

<211> 357

<212> PRT

<213> Homo sapiens

<400> 4734

Met Pro Glu Cys Trp Asp Gly Glu His Asp Ile Glu Thr Pro Tyr Gly
 1 5 10 15
 Leu Leu His Val Val Ile Arg Gly Ser Pro Lys Gly Asn Arg Pro Ala
 20 25 30
 Ile Leu Thr Tyr His Asp Val Gly Leu Asn Arg Lys Cys Ser Pro Ala
 35 40 45
 Ser Val Ser Pro Pro Leu Pro Pro Ile Ser Gln Ser Asp Lys Leu Cys
 50 55 60
 Phe Asn Thr Phe Phe Asn Phe Glu Asp Met Gln Glu Ile Thr Lys His
 65 70 75 80
 Phe Val Val Cys His Val Asp Ala Pro Gly Gln Gln Val Gly Ala Ser
 85 90 95

Gln Phe Pro Gln Gly Tyr Gln Phe Pro Ser Met Glu Gln Leu Ala Ala
 100 105 110
 Met Leu Pro Ser Val Val Gln His Phe Gly Phe Lys Tyr Val Ile Gly
 115 120 125
 Ile Gly Val Gly Ala Gly Ala Tyr Val Leu Ala Lys Phe Ala Leu Ile
 130 135 140
 Phe Pro Asp Leu Val Glu Gly Leu Val Leu Val Asn Ile Asp Pro Asn
 145 150 155 160
 Gly Lys Gly Trp Ile Asp Trp Ala Ala Thr Lys Leu Ser Gly Leu Thr
 165 170 175
 Ser Thr Leu Pro Asp Thr Val Leu Ser His Leu Phe Ser Gln Glu Glu
 180 185 190
 Leu Val Asn Asn Thr Glu Leu Val Gln Ser Tyr Arg Gln Gln Ile Gly
 195 200 205
 Asn Val Val Asn Gln Ala Asn Leu Gln Leu Phe Trp Asn Met Tyr Asn
 210 215 220
 Ser Arg Arg Asp Leu Asp Ile Asn Arg Pro Gly Thr Val Pro Asn Ala
 225 230 235 240
 Lys Thr Leu Arg Cys Pro Val Met Leu Val Val Gly Asp Asn Ala Pro
 245 250 255
 Ala Glu Asp Gly Val Val Glu Cys Asn Ser Lys Leu Asp Pro Thr Thr
 260 265 270
 Thr Thr Phe Leu Lys Met Ala Asp Ser Gly Gly Leu Pro Gln Val Thr
 275 280 285
 Gln Pro Gly Lys Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met
 290 295 300
 Gly Tyr Met Pro Ser Ala Ser Met Thr Arg Leu Ala Arg Ser Arg Thr
 305 310 315 320
 Ala Ser Leu Thr Ser Ala Ser Ser Val Asp Gly Ser Arg Pro Gln Ala
 325 330 335
 Cys Thr His Ser Glu Ser Ser Glu Gly Leu Gly Gln Val Asn His Thr
 340 345 350
 Met Glu Val Ser Cys
 355

<210> 4735

<211> 357

<212> PRT

<213> Homo sapiens

<400> 4735

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Met Ser Pro Gly Pro Thr Asn Phe Phe Val Phe Leu Leu Glu Met Gly
  1              5              10              15
Phe His His Ala Gly Arg Val Gly Pro Glu Leu Leu Thr Ser Gly Asp
          20              25              30
Pro Leu Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Glu Thr Glu Gly
      35              40              45
Ser Glu Glu Asp Asp Lys Glu Asn Asp Lys Thr Glu Glu Met Pro Asn
      50              55              60
Asp Ser Val Leu Glu Asn Lys Ser Leu Gln Glu Asn Glu Glu Glu Glu
      65              70              75              80
Ile Gly Asn Leu Glu Leu Ala Trp Asp Met Pro Asp Leu Ala Lys Ile
          85              90              95
Ile Phe Lys Arg Gln Glu Thr Lys Glu Ala Gln Leu Tyr Ala Ala Gln
          100             105             110
Ala His Leu Lys Leu Gly Glu Val Ser Val Glu Ser Glu Asn Tyr Val
          115             120             125
Gln Ala Val Glu Glu Phe Gln Ser Cys Leu Asn Leu Gln Glu Gln Tyr
          130             135             140
Leu Glu Ala His Asp Arg Leu Leu Ala Glu Thr His Tyr Gln Leu Gly
          145             150             155             160
Leu Ala Tyr Gly Tyr Asn Ser Gln Tyr Asp Glu Ala Val Ala Gln Phe
          165             170             175
Ser Lys Ser Ile Glu Val Ile Glu Asn Arg Met Ala Val Leu Asn Glu
          180             185             190
Gln Val Lys Glu Ala Glu Gly Ser Ser Ala Glu Tyr Lys Lys Glu Ile
          195             200             205
Glu Glu Leu Lys Glu Leu Leu Pro Glu Ile Arg Glu Lys Ile Glu Asp
          210             215             220
Ala Lys Glu Ser Gln Arg Ser Gly Asn Val Ala Glu Leu Ala Leu Lys
          225             230             235             240

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Ala Thr Leu Val Glu Ser Ser Thr Ser Gly Phe Thr Pro Gly Gly Gly
 245 250 255
 Gly Ser Ser Val Ser Met Ile Ala Ser Arg Lys Pro Thr Asp Gly Ala
 260 265 270
 Ser Ser Ser Asn Cys Val Thr Asp Ile Ser His Leu Val Arg Lys Lys
 275 280 285
 Arg Lys Pro Glu Glu Glu Ser Pro Arg Lys Asp Asp Ala Lys Lys Ala
 290 295 300
 Lys Gln Glu Pro Glu Val Asn Gly Gly Ser Gly Asp Ala Val Pro Ser
 305 310 315 320
 Gly Asn Glu Val Ser Glu Asn Met Glu Glu Glu Ala Glu Asn Gln Ala
 325 330 335
 Glu Ser Arg Ala Ala Val Glu Gly Thr Val Glu Ala Gly Ala Thr Val
 340 345 350
 Glu Ser Thr Ala Cys
 355

<210> 4736

<211> 217

<212> PRT

<213> Homo sapiens

<400> 4736

Met Leu Ser Leu Gln Asp Ser Val Phe Phe Glu Ile Ser Ile Lys Ser
 1 5 10 15
 Leu Leu Lys Ser Trp Ser Ser Ser Ser Ser Ala Pro Val Ser Lys Val
 20 25 30
 Asn Lys Tyr Cys Ala Ser Ser Asn Phe His Ser Thr Trp Gly Lys Lys
 35 40 45
 Asn Ile Ile Met Ser Asn Ile Thr Ile Asp Pro Asp Val Lys Pro Gly
 50 55 60
 Glu Tyr Val Ile Lys Ser Leu Phe Ala Glu Phe Ala Val Gln Ala Glu
 65 70 75 80
 Lys Lys Ile Glu Val Val Met Ala Glu Pro Leu Glu Lys Leu Leu Ser
 85 90 95

Arg Ser Leu Gln Arg Gly Glu Asp Leu Gln Phe Asp Gln Leu Ile Ser
 100 105 110
 Ser Met Ser Ser Val Ala Glu His Cys Leu Pro Ser Leu Leu Arg Thr
 115 120 125
 Leu Phe Asp Trp Tyr Arg Arg Gln Asn Gly Thr Glu Asp Glu Ser Tyr
 130 135 140
 Glu Tyr Arg Pro Arg Ser Ser Thr Lys Ser Lys Gly Asp Glu Gln Gln
 145 150 155 160
 Arg Glu Arg Asp Tyr Leu Leu Glu Arg Arg Asp Leu Ala Val Asp Phe
 165 170 175
 Ile Phe Cys Leu Val Leu Val Glu Val Leu Lys Gln Val Ser Ser Phe
 180 185 190
 Ile Ser Ala Lys Ser Val Phe Leu Ile Leu Cys Leu Leu Cys Leu Arg
 195 200 205
 Val Ser Val Thr Leu Arg Cys Cys Val
 210 215

<210> 4737

<211> 908

<212> PRT

<213> Homo sapiens

<400> 4737

Met Gly Val Asn Asp Leu Trp Gln Ile Leu Glu Pro Val Lys Gln His
 1 5 10 15
 Ile Pro Leu Arg Asn Leu Gly Gly Lys Thr Ile Ala Val Asp Leu Ser
 20 25 30
 Leu Trp Val Cys Glu Ala Gln Thr Val Lys Lys Met Met Gly Ser Val
 35 40 45
 Met Lys Pro His Leu Arg Asn Leu Phe Phe Arg Ile Ser Tyr Leu Thr
 50 55 60
 Gln Met Asp Val Lys Leu Val Phe Val Met Glu Gly Glu Pro Pro Lys
 65 70 75 80
 Leu Lys Ala Asp Val Ile Ser Lys Arg Asn Gln Thr Arg Tyr Gly Ser
 85 90 95

Ser Gly Lys Ser Trp Ser Gln Lys Thr Gly Arg Ser His Phe Lys Ser
 100 105 110
 Val Leu Arg Glu Cys Leu His Met Leu Glu Cys Leu Gly Ile Pro Trp
 115 120 125
 Val Gln Ala Ala Gly Glu Ala Glu Ala Met Cys Ala Tyr Leu Asn Ala
 130 135 140
 Gly Gly His Val Asp Gly Cys Leu Thr Asn Asp Gly Asp Thr Phe Leu
 145 150 155 160
 Tyr Gly Ala Gln Thr Val Tyr Arg Asn Phe Thr Met Asn Thr Lys Asp
 165 170 175
 Pro His Val Asp Cys Tyr Thr Met Ser Ser Ile Lys Ser Lys Leu Gly
 180 185 190
 Leu Asp Arg Asp Ala Leu Val Gly Leu Ala Ile Leu Leu Gly Cys Asp
 195 200 205
 Tyr Leu Pro Lys Gly Val Pro Gly Val Gly Lys Glu Gln Ala Leu Lys
 210 215 220
 Leu Ile Gln Ile Leu Lys Gly Gln Ser Leu Leu Gln Arg Phe Asn Arg
 225 230 235 240

 Trp Asn Glu Thr Ser Cys Asn Ser Ser Pro Gln Leu Leu Val Thr Lys
 245 250 255
 Lys Leu Ala His Cys Ser Val Cys Ser His Pro Gly Ser Pro Lys Asp
 260 265 270
 His Glu Arg Asn Gly Cys Arg Leu Cys Lys Ser Asp Lys Tyr Cys Glu
 275 280 285
 Pro His Asp Tyr Glu Tyr Cys Cys Pro Cys Glu Trp His Arg Thr Glu
 290 295 300
 His Asp Arg Gln Leu Asn Glu Val Glu Asn Asn Ile Lys Lys Lys Ala
 305 310 315 320
 Cys Cys Cys Glu Gly Phe Pro Phe His Glu Val Ile Gln Glu Phe Leu
 325 330 335
 Leu Asn Lys Asp Lys Leu Val Lys Val Ile Arg Tyr Gln Arg Pro Asp
 340 345 350
 Leu Leu Leu Phe Gln Arg Phe Thr Leu Glu Lys Met Glu Trp Pro Asn
 355 360 365
 His Tyr Ala Cys Glu Lys Leu Leu Val Leu Leu Thr His Tyr Asp Met

370	375	380	
Ile Glu Arg Lys Leu Gly Ser Arg Asn Ser Asn Gln Leu Gln Pro Ile			
385	390	395	400
Arg Ile Val Lys Thr Arg Ile Arg Asn Gly Val His Cys Phe Glu Ile			
405	410	415	
Glu Trp Glu Lys Pro Glu His Tyr Ala Met Glu Asp Lys Gln His Gly			
420	425	430	
Glu Phe Ala Leu Leu Thr Ile Glu Glu Glu Ser Leu Phe Glu Ala Ala			
435	440	445	
Tyr Pro Glu Ile Val Ala Val Tyr Gln Lys Gln Lys Leu Glu Ile Lys			
450	455	460	
Gly Lys Lys Gln Lys Arg Ile Lys Pro Lys Glu Asn Asn Leu Pro Glu			
465	470	475	480
Pro Asp Glu Val Met Ser Phe Gln Ser His Met Thr Leu Lys Pro Thr			
485	490	495	
Cys Glu Ile Phe His Lys Gln Asn Ser Lys Leu Asn Ser Gly Ile Ser			
500	505	510	
Pro Asp Pro Thr Leu Pro Gln Glu Ser Ile Ser Ala Ser Leu Asn Ser			
515	520	525	
Leu Leu Leu Pro Lys Asn Thr Pro Cys Leu Asn Ala Gln Glu Gln Phe			
530	535	540	
Met Ser Ser Leu Arg Pro Leu Ala Ile Gln Gln Ile Lys Ala Val Ser			
545	550	555	560
Lys Ser Leu Ile Ser Glu Ser Ser Gln Pro Asn Thr Ser Ser His Asn			
565	570	575	
Ile Ser Val Ile Ala Asp Leu His Leu Ser Thr Ile Asp Trp Glu Gly			
580	585	590	
Thr Ser Phe Ser Asn Ser Pro Ala Ile Gln Arg Asn Thr Phe Ser His			
595	600	605	
Asp Leu Lys Ser Glu Val Glu Ser Glu Leu Ser Ala Ile Pro Asp Gly			
610	615	620	
Phe Glu Asn Ile Pro Glu Gln Leu Ser Cys Glu Ser Glu Arg Tyr Thr			
625	630	635	640
Ala Asn Ile Lys Lys Val Leu Asp Glu Asp Ser Asp Gly Ile Ser Pro			
645	650	655	
Glu Glu His Leu Leu Ser Gly Ile Thr Asp Leu Cys Leu Gln Asp Leu			

660	665	670
Pro Leu Lys Glu Arg Ile Phe Ile Lys Leu Ser Tyr Pro Gln Asp Asn		
675	680	685
Leu Gln Pro Asp Val Asn Leu Lys Thr Leu Ser Ile Leu Ser Val Lys		
690	695	700
Glu Ser Cys Ile Ala Asn Ser Gly Ser Asp Cys Thr Ser His Leu Ser		
705	710	715
Lys Asp Leu Pro Gly Ile Pro Leu Gln Asn Glu Ser Arg Asp Ser Lys		
725	730	735
Ile Leu Lys Gly Asp Gln Leu Leu Gln Glu Asp Tyr Lys Val Asn Thr		
740	745	750
Ser Val Pro Tyr Ser Val Ser Asn Thr Val Val Lys Thr Cys Asn Val		
755	760	765
Arg Pro Pro Asn Thr Ala Leu Asp His Ser Arg Lys Val Asp Met Gln		
770	775	780
Thr Thr Arg Lys Ile Leu Met Lys Lys Ser Val Cys Leu Asp Arg His		
785	790	795
Ser Ser Asp Glu Gln Ser Ala Pro Val Phe Gly Lys Ala Lys Tyr Thr		
805	810	815
Thr Gln Arg Met Lys His Ser Ser Gln Lys His Asn Ser Ser His Phe		
820	825	830
Lys Glu Ser Gly His Asn Lys Leu Ser Ser Pro Lys Ile His Ile Lys		
835	840	845
Glu Thr Glu Gln Cys Val Arg Ser Tyr Glu Thr Ala Glu Asn Glu Glu		
850	855	860
Ser Cys Phe Pro Asp Ser Thr Lys Ser Ser Leu Ser Ser Leu Gln Cys		
865	870	875
His Lys Lys Glu Asn Asn Ser Gly Thr Cys Leu Asp Ser Pro Leu Pro		
885	890	895
Leu Cys Gln Arg Leu Lys Leu Arg Phe Gln Ser Thr		
900	905	

<210> 4738

<211> 637

<212> PRT

<213> Homo sapiens

<400> 4738

Met Leu Pro Asn Phe Lys Leu Tyr Asn Phe Ile Glu Ile Phe Phe Lys
 1 5 10 15
 Pro Leu Thr Pro Ser Lys Asn Arg Phe His Phe Val Ser Tyr Phe Glu
 20 25 30
 Asn Val Asn Phe Met Leu Cys Trp Leu Gln Glu Asn Asn Phe Cys Leu
 35 40 45
 Leu Leu Cys Phe Leu Ser Gly Leu Leu Ser Arg His Lys Thr Lys Lys
 50 55 60
 Leu Ser Ser Glu Lys Asp Ile His Glu Ile Ser Leu Ser Lys Glu Ser
 65 70 75 80
 Ile Ile Glu Lys Ser Lys Thr Leu Arg Leu Lys Gly Ser Ile Phe Arg
 85 90 95
 Asn Glu Trp Gln Asn Lys Ser Glu Phe Glu Gly Gln Gln Gly Leu Lys
 100 105 110
 Glu Arg Ser Ile Ser Gln Lys Lys Ile Val Ser Lys Lys Met Ser Thr
 115 120 125
 Asp Arg Lys Arg Pro Ser Phe Thr Leu Asn Gln Arg Ile His Asn Ser
 130 135 140
 Glu Lys Ser Cys Asp Ser His Leu Val Gln His Gly Lys Ile Asp Ser
 145 150 155 160
 Asp Val Lys His Asp Cys Lys Glu Cys Gly Ser Thr Phe Asn Asn Val
 165 170 175
 Tyr Gln Leu Thr Leu His Gln Lys Ile His Thr Gly Glu Lys Ser Cys
 180 185 190
 Lys Cys Glu Lys Cys Gly Lys Val Phe Ser His Ser Tyr Gln Leu Thr
 195 200 205
 Leu His Gln Arg Phe His Thr Gly Glu Lys Pro Tyr Glu Cys Gln Glu
 210 215 220
 Cys Gly Lys Thr Phe Thr Leu Tyr Pro Gln Leu Asn Arg His Gln Lys
 225 230 235 240
 Ile His Thr Gly Lys Lys Pro Tyr Met Cys Lys Lys Cys Asp Lys Gly
 245 250 255
 Phe Phe Ser Arg Leu Glu Leu Thr Gln His Lys Arg Ile His Thr Gly

260	265	270
Lys Lys Ser Tyr Glu Cys Lys	Glu Cys Gly Lys Val Phe Gln Leu Ile	
275	280	285
Phe Tyr Phe Lys Glu His Glu Arg Ile His Thr Gly Lys Lys Pro Tyr		
290	295	300
Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser Val Cys Gly Gln Leu Thr		
305	310	315
Arg His Gln Lys Ile His Thr Gly Val Lys Pro Tyr Glu Cys Lys Glu		
325	330	335
Cys Gly Lys Thr Phe Arg Leu Ser Phe Tyr Leu Thr Glu His Arg Arg		
340	345	350
Thr His Ala Gly Lys Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ser		
355	360	365
Phe Asn Val Arg Gly Gln Leu Asn Arg His Lys Thr Ile His Thr Gly		
370	375	380
Ile Lys Pro Phe Ala Cys Lys Val Cys Glu Lys Ala Phe Ser Tyr Ser		
385	390	395
Gly Asp Leu Arg Val His Ser Arg Ile His Thr Gly Glu Lys Pro Tyr		
405	410	415
Glu Cys Lys Glu Cys Gly Lys Ala Phe Met Leu Arg Ser Val Leu Thr		
420	425	430
Glu His Gln Arg Leu His Thr Gly Val Lys Pro Tyr Glu Cys Lys Glu		
435	440	445
Cys Gly Lys Thr Phe Arg Val Arg Ser Gln Ile Ser Leu His Lys Lys		
450	455	460
Ile His Thr Asp Val Lys Pro Tyr Lys Cys Val Arg Cys Gly Lys Thr		
465	470	475
Phe Arg Phe Gly Phe Tyr Leu Thr Glu His Gln Arg Ile His Thr Gly		
485	490	495
Glu Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Ile Arg Arg		
500	505	510
Gly Asn Leu Lys Glu His Leu Lys Ile His Ser Gly Leu Lys Pro Tyr		
515	520	525
Asp Cys Lys Glu Cys Gly Lys Ser Phe Ser Arg Arg Gly Gln Phe Thr		
530	535	540
Glu His Gln Lys Ile His Thr Gly Val Lys Pro Tyr Lys Cys Lys Glu		

545 550 555 560
 Cys Gly Lys Ala Phe Ser Arg Ser Val Asp Leu Arg Ile His Gln Arg
 565 570 575
 Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Gln Cys Gly Lys Ala
 580 585 590
 Phe Arg Leu Asn Ser His Leu Thr Glu His Gln Arg Ile His Thr Gly
 595 600 605
 Glu Lys Pro Tyr Glu Cys Lys Val Cys Arg Lys Ala Phe Arg Gln Tyr
 610 615 620
 Ser His Leu Tyr Gln His Gln Lys Thr His Asn Val Ile
 625 630 635

<210> 4739

<211> 170

<212> PRT

<213> Homo sapiens

<400> 4739

Met Arg Ala Ala Val Pro His Gln Gly Ile Lys Phe Phe Lys Thr Leu
 1 5 10 15
 Val Pro Tyr Asp Glu Gly Ala Pro Ala Phe Glu Gly Arg Ala Pro Ala
 20 25 30

 Phe Ser His Ala Ser Leu His Pro Arg Tyr Asp Leu Met Tyr Gln Cys
 35 40 45
 Trp Ser Ala Asp Pro Lys Gln Arg Pro Ser Phe Thr Cys Leu Arg Met
 50 55 60
 Glu Leu Glu Asn Ile Leu Gly Gln Leu Ser Val Leu Ser Ala Ser Gln
 65 70 75 80
 Asp Pro Leu Tyr Ile Asn Ile Glu Arg Ala Glu Glu Pro Thr Ala Gly
 85 90 95
 Gly Ser Leu Glu Leu Pro Gly Arg Asp Gln Pro Tyr Ser Gly Ala Gly
 100 105 110
 Asp Gly Ser Gly Met Gly Ala Val Gly Gly Thr Pro Ser Asp Cys Arg
 115 120 125

Tyr Ile Leu Thr Pro Gly Gly Leu Ala Glu Gln Pro Gly Gln Ala Glu
 130 135 140
 His Gln Pro Glu Ser Pro Leu Asn Glu Thr Gln Arg Leu Leu Leu Leu
 145 150 155 160
 Gln Gln Gly Leu Leu Pro His Ser Ser Cys
 165 170

<210> 4740

<211> 492

<212> PRT

<213> Homo sapiens

<400> 4740

Met Ala Ser Pro Ser Gly Lys Gly Ala Arg Ala Leu Glu Ala Pro Gly
 1 5 10 15
 Cys Gly Pro Arg Pro Leu Ala Arg Asp Leu Val Asp Ser Val Asp Asp
 20 25 30
 Ala Glu Gly Leu Tyr Val Ala Val Glu Arg Cys Pro Leu Cys Asn Thr
 35 40 45
 Thr Arg Arg Arg Leu Thr Cys Ala Lys Cys Val Gln Ser Gly Asp Phe
 50 55 60
 Val Tyr Phe Asp Gly Arg Asp Arg Glu Arg Phe Ile Asp Lys Lys Glu
 65 70 75 80
 Arg Leu Ser Arg Leu Lys Ser Lys Gln Glu Glu Phe Gln Lys Glu Val
 85 90 95
 Leu Lys Ala Met Glu Gly Lys Trp Ile Thr Asp Gln Leu Arg Trp Lys
 100 105 110
 Ile Met Ser Cys Lys Met Arg Ile Glu Gln Leu Lys Gln Thr Ile Cys
 115 120 125
 Lys Gly Asn Glu Glu Met Glu Lys Asn Ser Glu Gly Leu Leu Lys Thr
 130 135 140
 Lys Glu Lys Asn Gln Lys Leu Tyr Ser Arg Ala Gln Arg His Gln Glu
 145 150 155 160
 Lys Lys Glu Lys Ile Gln Arg His Asn Arg Lys Leu Gly Asp Leu Val
 165 170 175

Glu Lys Lys Thr Ile Asp Leu Arg Ser His Tyr Glu Arg Leu Ala Asn
 180 185 190
 Leu Arg Arg Ser His Ile Leu Glu Leu Thr Ser Val Ile Phe Pro Ile
 195 200 205
 Glu Glu Val Lys Thr Gly Val Arg Asp Pro Ala Asp Val Ser Ser Glu
 210 215 220
 Ser Asp Ser Ala Met Thr Ser Ser Thr Val Ser Lys Leu Ala Glu Ala
 225 230 235 240
 Arg Arg Thr Thr Tyr Leu Ser Gly Arg Trp Val Cys Asp Asp His Asn
 245 250 255
 Gly Asp Thr Ser Ile Ser Ile Thr Gly Pro Trp Ile Ser Leu Pro Asn
 260 265 270
 Asn Gly Asp Tyr Ser Ala Tyr Tyr Ser Trp Val Glu Glu Lys Lys Thr
 275 280 285
 Thr Gln Gly Pro Asp Met Glu Gln Ser Asn Pro Ala Tyr Thr Ile Ser
 290 295 300
 Ala Ala Leu Cys Tyr Ala Thr Gln Leu Val Asn Ile Leu Ser His Ile
 305 310 315 320
 Leu Asp Val Asn Leu Pro Lys Lys Leu Cys Asn Ser Glu Phe Cys Gly
 325 330 335
 Glu Asn Leu Ser Lys Gln Lys Phe Thr Arg Ala Val Lys Lys Leu Asn
 340 345 350
 Ala Asn Ile Leu Tyr Leu Cys Phe Ser Gln His Val Asn Leu Asp Gln
 355 360 365
 Leu Gln Pro Leu His Thr Leu Arg Asn Leu Met Tyr Leu Val Ser Pro
 370 375 380
 Ser Ser Glu His Leu Gly Arg Ser Gly Pro Phe Glu Val Arg Ala Asp
 385 390 395 400
 Leu Glu Glu Ser Met Glu Phe Val Asp Pro Gly Val Ala Gly Glu Ser
 405 410 415
 Asp Glu Ser Gly Asp Glu Arg Val Ser Asp Glu Glu Thr Asp Leu Gly
 420 425 430
 Thr Asp Trp Glu Asn Leu Pro Ser Pro Arg Phe Cys Asp Ile Pro Ser
 435 440 445
 Gln Ser Val Glu Val Ser Gln Ser Gln Ser Thr Gln Ala Ser Pro Pro
 450 455 460

Ile Ala Ser Ser Ser Ala Gly Gly Met Ile Ser Ser Ala Ala Ala Ser
 465 470 475 480
 Val Thr Ser Trp Phe Lys Ala Tyr Thr Gly His Arg
 485 490

<210> 4741

<211> 415

<212> PRT

<213> Homo sapiens

<400> 4741

Met Leu Ser Met Thr Tyr Ser Glu Ser Leu Arg Ser Val Ser Ser Arg
 1 5 10 15
 Cys His Ser Glu Trp Ala Leu His Pro Val Arg Gln Thr Asp Thr Leu
 20 25 30
 Glu Leu Gln Arg Leu Arg Glu Val Arg Ala Ala Ala Gln Ala Arg Asn
 35 40 45
 Met Glu Ser Phe Leu Arg Met His Gly Leu Ser Leu Asp Gly Cys Thr
 50 55 60
 Ala Gln Arg Thr Gly Met Lys Tyr Arg Asn Leu Gly Lys Ser Gly Leu
 65 70 75 80
 Arg Val Ser Cys Leu Gly Leu Gly Thr Trp Val Thr Phe Gly Gly Gln
 85 90 95
 Ile Thr Asp Glu Met Ala Glu Gln Leu Met Thr Leu Ala Tyr Asp Asn
 100 105 110
 Gly Ile Asn Leu Phe Asp Thr Ala Glu Val Tyr Ala Ala Gly Lys Ala
 115 120 125
 Glu Val Val Leu Gly Asn Ile Ile Lys Lys Lys Gly Trp Arg Arg Ser
 130 135 140
 Ser Leu Val Ile Thr Thr Lys Ile Phe Trp Gly Gly Lys Ala Glu Thr
 145 150 155 160
 Glu Arg Gly Leu Ser Arg Lys His Ile Ile Glu Gly Leu Lys Ala Ser
 165 170 175
 Leu Glu Arg Leu Gln Leu Glu Tyr Val Asp Val Val Phe Ala Asn Arg
 180 185 190

Pro Asp Pro Asn Thr Pro Met Glu Gly Asp Pro Phe Ser Ser Ser Lys
 195 200 205
 Ser Arg Thr Phe Ile Ile Glu Glu Thr Val Arg Ala Met Thr His Val
 210 215 220
 Ile Asn Gln Gly Met Ala Met Tyr Trp Gly Thr Ser Arg Trp Ser Ser
 225 230 235 240
 Met Glu Ile Met Glu Ala Tyr Ser Val Ala Arg Gln Phe Asn Leu Thr
 245 250 255
 Pro Pro Ile Cys Glu Gln Ala Glu Tyr His Met Phe Gln Arg Glu Lys
 260 265 270
 Val Glu Val Gln Leu Pro Glu Leu Phe His Lys Ile Gly Val Gly Ala
 275 280 285
 Met Thr Trp Ser Pro Leu Ala Cys Gly Ile Val Ser Gly Lys Tyr Asp
 290 295 300
 Ser Gly Ile Pro Pro Tyr Ser Arg Ala Ser Leu Lys Gly Tyr Gln Trp
 305 310 315 320
 Leu Lys Asp Lys Ile Leu Ser Glu Glu Gly Arg Arg Gln Gln Ala Lys
 325 330 335
 Leu Lys Glu Leu Gln Ala Ile Ala Glu Arg Leu Gly Cys Thr Leu Pro
 340 345 350
 Gln Leu Ala Ile Ala Trp Cys Leu Arg Asn Glu Gly Val Ser Ser Val
 355 360 365
 Leu Leu Gly Ala Ser Asn Ala Asp Gln Leu Met Glu Asn Ile Gly Ala
 370 375 380
 Ile Gln Val Leu Pro Lys Leu Ser Ser Ser Ile Ile His Glu Ile Asp
 385 390 395 400
 Ser Ile Leu Gly Asn Lys Pro Tyr Ser Lys Lys Asp Tyr Arg Ser
 405 410 415

<210> 4742

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4742

Met Arg Gln Trp Pro Val Ala Val Pro Cys Ser Arg Gln Gln Cys Cys
 1 5 10 15
 Arg Ser Ser Leu Gln Pro Thr Ile Cys His Tyr Phe Met Arg Leu Leu
 20 25 30
 Lys Asp Lys Gly Leu Leu Leu Arg Cys Tyr Thr Gln Asn Ile Asp Thr
 35 40 45
 Leu Glu Arg Ile Ala Gly Leu Glu Gln Glu Asp Leu Val Glu Ala His
 50 55 60
 Gly Thr Phe Tyr Thr Ser His Cys Val Ser Ala Ser Cys Arg His Glu
 65 70 75 80
 Tyr Pro Leu Ser Trp Met Lys Glu Lys Ile Phe Ser Glu Val Thr Pro
 85 90 95
 Lys Cys Glu Asp Cys Gln Ser Leu Val Lys Pro Gly Glu Pro Leu Ala
 100 105 110
 Arg Asp Leu Pro Arg Trp Ile Trp Val Gly Val Pro Ser Ser Pro
 115 120 125

<210> 4743

<211> 540

<212> PRT

<213> Homo sapiens

<400> 4743

Met Pro Asn Lys Asn Lys Lys Glu Lys Glu Ser Pro Lys Ala Gly Lys
 1 5 10 15
 Ser Gly Lys Ser Ser Lys Glu Gly Gln Asp Thr Val Glu Ser Glu Gln
 20 25 30
 Ile Ser Val Arg Lys Asn Ser Leu Val Ala Val Pro Ser Thr Val Ser
 35 40 45
 Ala Lys Ile Lys Val Pro Val Ser Gln Pro Ile Val Lys Lys Asp Lys
 50 55 60
 Arg Gln Asn Ser Ser Arg Phe Ser Ala Ser Asn Asn Arg Glu Leu Gln
 65 70 75 80
 Lys Leu Pro Ser Leu Lys Asp Val Pro Pro Ala Asp Gln Glu Lys Leu
 85 90 95

Phe Ile Gln Lys Leu Arg Gln Cys Cys Val Leu Phe Asp Phe Val Ser
 100 105 110
 Asp Pro Leu Ser Asp Leu Lys Trp Lys Glu Val Lys Arg Ala Ala Leu
 115 120 125
 Ser Glu Met Val Glu Tyr Ile Thr His Asn Arg Asn Val Ile Thr Glu
 130 135 140
 Pro Ile Tyr Pro Glu Val Val His Met Phe Ala Val Asn Met Phe Arg
 145 150 155 160
 Thr Leu Pro Pro Ser Ser Asn Pro Thr Gly Ala Glu Phe Asp Pro Glu
 165 170 175
 Glu Asp Glu Pro Thr Leu Glu Ala Ala Trp Pro His Leu Gln Leu Val
 180 185 190
 Tyr Glu Phe Phe Leu Arg Phe Leu Glu Ser Pro Asp Phe Gln Pro Asn
 195 200 205
 Ile Ala Lys Lys Tyr Ile Asp Gln Lys Phe Val Leu Gln Leu Leu Glu
 210 215 220
 Leu Phe Asp Ser Glu Asp Pro Arg Glu Arg Asp Phe Leu Lys Thr Thr
 225 230 235 240
 Leu His Arg Ile Tyr Gly Lys Phe Leu Gly Leu Arg Ala Tyr Ile Arg
 245 250 255
 Lys Gln Ile Asn Asn Ile Phe Tyr Arg Phe Ile Tyr Glu Thr Glu His
 260 265 270
 His Asn Gly Ile Ala Glu Leu Leu Glu Ile Leu Gly Ser Ile Ile Asn
 275 280 285
 Gly Phe Ala Leu Pro Leu Lys Glu Glu His Lys Ile Phe Leu Leu Lys
 290 295 300
 Val Leu Leu Pro Leu His Lys Val Lys Ser Leu Ser Val Tyr His Pro
 305 310 315 320
 Gln Leu Ala Tyr Cys Val Val Gln Phe Leu Glu Lys Asp Ser Thr Leu
 325 330 335
 Thr Glu Pro Val Val Met Ala Leu Leu Lys Tyr Trp Pro Lys Thr His
 340 345 350
 Ser Pro Lys Glu Val Met Phe Leu Asn Glu Leu Glu Glu Ile Leu Asp
 355 360 365
 Val Ile Glu Pro Ser Glu Phe Val Lys Ile Met Glu Pro Leu Phe Arg
 370 375 380

Gln Leu Ala Lys Cys Val Ser Ser Pro His Phe Gln Val Ala Glu Arg
 385 390 395 400
 Ala Leu Tyr Tyr Trp Asn Asn Glu Tyr Ile Met Ser Leu Ile Ser Asp
 405 410 415
 Asn Ala Ala Lys Ile Leu Pro Ile Met Phe Pro Ser Leu Tyr Arg Asn
 420 425 430
 Ser Lys Thr His Trp Asn Lys Thr Ile His Gly Leu Ile Tyr Asn Ala
 435 440 445
 Leu Lys Leu Phe Met Glu Met Asn Gln Lys Leu Phe Asp Asp Cys Thr
 450 455 460
 Gln Gln Phe Lys Ala Glu Lys Leu Lys Glu Lys Leu Lys Met Lys Glu
 465 470 475 480
 Arg Glu Glu Ala Trp Val Lys Ile Glu Asn Leu Ala Lys Ala Asn Pro
 485 490 495
 Gln Ala Gln Lys Asp Pro Lys Lys Asp Arg Pro Leu Ala Arg Arg Lys
 500 505 510
 Ser Glu Leu Pro Gln Asp Pro His Thr Lys Lys Ala Leu Glu Ala His
 515 520 525
 Cys Arg Ala Asp Glu Leu Ala Ser Gln Asp Gly Arg
 530 535 540

<210> 4744

<211> 361

<212> PRT

<213> Homo sapiens

<400> 4744

Met His Cys Ser Cys Leu Ala Glu Gly Ile Pro Ala Asn Pro Gly Asn
 1 5 10 15
 Trp Ile Ser Gly Leu Ala Phe Pro Asp Trp Ala Tyr Lys Ala Glu Ser
 20 25 30
 Ser Pro Gly Ser Arg Gln Ile Gln Leu Trp His Phe Ile Leu Glu Leu
 35 40 45
 Leu Gln Lys Glu Glu Phe Arg His Val Ile Ala Trp Gln Gln Gly Glu
 50 55 60

Tyr Gly Glu Phe Val Ile Lys Asp Pro Asp Glu Val Ala Arg Leu Trp
 65 70 75 80
 Gly Arg Arg Lys Cys Lys Pro Gln Met Asn Tyr Asp Lys Leu Ser Arg
 85 90 95
 Ala Leu Arg Tyr Tyr Tyr Asn Lys Arg Ile Leu His Lys Thr Lys Gly
 100 105 110
 Lys Arg Phe Thr Tyr Lys Phe Asn Phe Ser Lys Leu Ile Val Val Asn
 115 120 125
 Tyr Pro Leu Trp Glu Val Arg Ala Pro Pro Ser Pro His Leu Leu Leu
 130 135 140
 Gly Ala Pro Ala Leu Cys Arg Pro Ala Leu Val Pro Val Gly Val Gln
 145 150 155 160
 Ser Glu Leu Leu His Ser Met Leu Phe Ala His Gln Ala Met Val Glu
 165 170 175
 Gln Leu Thr Gly Gln Gln Thr Pro Arg Gly Pro Pro Glu Thr Ser Gly
 180 185 190
 Asp Lys Lys Gly Ser Ser Ser Ser Val Tyr Arg Leu Gly Ser Ala Pro
 195 200 205
 Gly Pro Cys Arg Leu Gly Leu Cys Cys His Leu Gly Ser Val Gln Gly
 210 215 220
 Glu Leu Pro Gly Val Ala Ser Phe Thr Pro Pro Leu Pro Pro Pro Leu
 225 230 235 240
 Pro Ser Asn Trp Thr Cys Leu Ser Gly Pro Phe Leu Pro Pro Leu Pro
 245 250 255
 Ser Glu Gln Gln Leu Pro Gly Ala Phe Lys Pro Asp Ile Leu Leu Pro
 260 265 270
 Gly Pro Arg Ser Leu Pro Gly Ala Trp His Phe Pro Gly Leu Pro Leu
 275 280 285
 Leu Ala Gly Leu Gly Gln Gly Ala Gly Glu Arg Leu Trp Leu Leu Ser
 290 295 300
 Leu Arg Pro Glu Gly Leu Glu Val Lys Pro Ala Pro Met Met Glu Ala
 305 310 315 320
 Lys Gly Gly Leu Asp Pro Arg Glu Val Phe Cys Pro Glu Thr Arg Arg
 325 330 335
 Leu Lys Thr Gly Glu Glu Ser Leu Thr Ser Pro Asn Leu Glu Asn Leu
 340 345 350

Lys Ala Val Trp Pro Leu Asp Pro Pro

355

360

<210> 4745

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4745

Met Met Lys Thr Leu Asn Ile Leu Asp Met Glu Gly Met Phe Leu Asn

1

5

10

15

Thr Ile Lys Ala Ile Tyr Asp Lys Leu Ile Ala Asn Ile Val Leu Ser

20

25

30

Gly Lys Lys Leu Lys Ala Phe Pro Ile Arg Pro Arg Thr Arg Gln Gly

35

40

45

Cys Pro Leu Leu Pro Leu Leu Phe Asn Ile Val Pro Glu Val Leu Ala

50

55

60

Arg Ala Ile Arg Gln Glu Lys Glu Ile Lys Asp Ile Gln Ile Gly Lys

65

70

75

80

Ser Glu Met Lys Leu Ser Leu Phe Ala Asp Asn Met Ile Leu His Ile

85

90

95

Glu Asn Leu Lys Asp Cys Thr Lys Thr Pro Phe Glu Leu Asp Lys Ser

100

105

110

Ser Lys Val Ala Gly Tyr Lys Ile Asn Leu Gln Lys Ser Val His Phe

115

120

125

Tyr Thr Leu Thr Val Asn Phe Leu Lys Lys Lys Leu Arg Lys Gln Ser

130

135

140

His Leu Gln Tyr His Leu Leu Leu Ser Lys Ile Leu Arg Arg Lys Phe

145

150

155

160

Asn Gln Gly Ser Glu Arg Ser Ile His

165

<210> 4746

<211> 182

<212> PRT

<213> Homo sapiens

<400> 4746

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Met Trp Ile Leu Arg Val Leu Leu Gly Arg His Leu Pro Gln Trp Asn
  1             5             10            15
Ala Ser Ser Glu Trp Cys Met Ala Gly Pro His Gly Gly Ser Thr Gln
      20             25            30
Gly Leu Asn Thr Gly Lys Glu Leu Ala Arg Gly Val Arg Thr Ser Gly
      35             40            45
Ile Trp Glu Ser Ala Ala Trp Asp His Lys Glu Ser Lys Ser Ser Ala
      50             55            60
Thr Cys Trp Ser Leu Arg Pro Glu Gly Arg Pro Asp Phe Arg Asp His
      65             70            75            80
Pro Trp Met Ser Leu Asp Trp Glu Leu Tyr Val Asp Gly Ser Asn Phe
      85             90            95
Val Asn Ser Gln Gly Glu Arg Cys Val Gly Tyr Ala Val Val Thr Leu
      100            105            110
Asp Ala Val Ile Glu Ala Lys Ser Leu Pro Gln Gly Thr Ser Ala Gln
      115            120            125
Lys Ala Glu Leu Ile Ala Leu Ile Arg Ala Ser Glu Leu Ser Glu Gly
      130            135            140
Lys Thr Val Asn Ile Tyr Thr Asp Ser Gln Tyr Ala Phe Leu Thr Leu
      145            150            155            160
Gln Val His Gly Ala Leu Tyr Lys Glu Lys Gly Leu Leu Asn Ser Gly
      165            170            175
Gly Lys Asp Val Lys Tyr
      180

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<210> 4747

<211> 957

<212> PRT

<213> Homo sapiens

<400> 4747

Met Thr Ser Phe Leu Lys Pro Glu Asn Ala Leu Lys Arg Ala Glu Glu
 1 5 10 15
 Leu Ile Asn Val Gly Gln Lys Gln Asp Ala Leu Gln Thr Leu His Asp
 20 25 30
 Leu Ile Thr Ser Lys Arg Tyr Arg Ala Trp Gln Lys Thr Leu Glu Arg
 35 40 45
 Ile Met Phe Lys Tyr Val Glu Leu Cys Val Asp Met Arg Lys Gly Arg
 50 55 60
 Phe Ala Lys Asp Gly Leu Ile Gln Tyr Arg Ile Ile Cys Gln Gln Val
 65 70 75 80
 Asn Val Ser Ser Leu Glu Glu Val Ile Lys His Phe Met Gln Leu Ser
 85 90 95
 Thr Glu Lys Ala Glu Gln Ala Arg Ser Gln Ala Gln Ala Leu Glu Glu
 100 105 110
 Ala Leu Asp Val Asp Asp Leu Glu Ala Asp Lys Arg Pro Glu Asp Leu
 115 120 125
 Met Leu Ser Tyr Val Ser Gly Glu Lys Gly Lys Asp Arg Ser Asp Arg
 130 135 140
 Glu Thr Val Thr Pro Trp Phe Lys Phe Leu Trp Glu Thr Tyr Arg Thr
 145 150 155 160
 Val Leu Glu Ile Leu Arg Asn Asn Ser Lys Leu Glu Ala Leu Tyr Ala
 165 170 175
 Met Thr Ala His Arg Ala Phe Gln Phe Cys Lys Gln Tyr Lys Arg Thr
 180 185 190
 Thr Glu Leu Arg Arg Leu Cys Glu Ile Ile Arg Asn His Leu Ala Asn
 195 200 205
 Leu Asn Lys Tyr Arg Asp Gln Arg Asp Arg Pro Asp Leu Ser Ala Pro
 210 215 220
 Glu Ser Leu Gln Leu Tyr Leu Asp Thr Arg Phe Glu Gln Leu Lys Ile
 225 230 235 240
 Ala Thr Glu Leu Gly Leu Trp Gln Glu Ala Phe Arg Ser Val Glu Asp
 245 250 255
 Ile His Gly Leu Met Cys Leu Val Lys Lys Thr Pro Lys Pro Ser Leu
 260 265 270
 Met Val Val Tyr Tyr Val Lys Leu Thr Glu Ile Phe Trp Ile Ser Ser

275	280	285
Ser His Leu Tyr His Ala Tyr Ala Trp Phe Lys Leu Phe Leu Leu Gln		
290	295	300
Lys Ser Phe Asn Lys Asn Leu Ser Gln Lys Asp Leu Gln Leu Ile Ala		
305	310	315
Ser Ser Val Val Leu Ala Ala Leu Ser Val Pro Pro His Asp Arg Thr		
	325	330
His Gly Ala Ser His Leu Glu Leu Glu His Glu Lys Glu Arg Asn Leu		
	340	345
Arg Met Ala Asn Leu Ile Gly Phe Asn Leu Glu Thr Lys Pro Glu Ser		
	355	360
Arg Glu Met Leu Ser Arg Ala Ser Leu Leu Ala Glu Leu Ala Ser Lys		
	370	375
Gly Val Met Ser Cys Val Thr Gln Glu Val Lys Asp Ile Tyr His Leu		
385	390	395
Leu Glu His Glu Phe Tyr Pro Ser Asp Leu Ala Leu Lys Ala Leu Pro		
	405	410
Leu Ile Thr Lys Ile Ser Lys Leu Gly Gly Lys Leu Ser Thr Ala Ser		
	420	425
Ser Val Pro Glu Val Gln Leu Ala Gln Tyr Val Pro Ala Leu Glu Arg		
	435	440
Leu Ala Thr Met Arg Leu Leu Gln Gln Val Ser Asn Val Tyr Gln Ser		
	450	455
Met Lys Ile Glu Thr Leu Ser Gly Met Ile Pro Phe Phe Asp Phe Ala		
465	470	475
Gln Val Glu Lys Ile Ser Val Asp Ala Val Lys Gln Lys Phe Val Ser		
	485	490
Met Lys Val Asp His Met Lys Asn Ala Val Ile Phe Ser Lys Lys Ser		
	500	505
Leu Glu Ser Asp Gly Leu Arg Asp His Leu Gly Asn Phe Ala Glu Gln		
	515	520
Leu Asn Lys Ala Arg Gln Met Ile Tyr Pro Pro Asp Gly Arg Pro Ser		
	530	535
Lys Leu Gly Ala Leu Leu Pro Thr Leu Thr Glu Val Val Ala Lys Glu		
545	550	555
His Lys Arg Leu Leu Ala Arg Lys Ser Ile Ile Glu Lys Arg Lys Glu		

	565		570		575
Glu Gln Glu Arg Gln Leu Leu Glu Met Glu Arg Glu Glu Glu Ser Lys					
	580		585		590
Arg Leu Arg Leu Gln Lys Ile Thr Glu Glu Ala Glu Gln Arg Arg Leu					
	595		600		605
Ala Thr Glu Tyr Glu Gln Arg Lys Asn Gln Arg Ile Leu Arg Glu Ile					
	610		615		620
Glu Glu Arg Glu Asn Glu Glu Ala Gln Ala Leu Leu Gln Glu Ala Glu					
625		630		635	640
Lys Arg Ile Lys Lys Lys Gly Lys Lys Pro Ile Ile Glu Gly Asp Lys					
	645		650		655
Ile Thr Lys Gln Thr Leu Met Glu Leu Thr Leu Thr Glu Gln Leu Arg					
	660		665		670
Glu Arg Gln Glu Met Glu Lys Lys Leu Gln Lys Leu Ala Lys Thr Met					
	675		680		685
Asp Tyr Leu Glu Arg Ala Lys Arg Glu Glu Ala Ala Pro Leu Ile Glu					
	690		695		700
Ala Ala Tyr Gln Gln Arg Leu Val Glu Glu Arg Leu Leu His Glu Arg					
705		710		715	720
Glu Gln Gln Gln Glu Val Glu Leu Ser Lys Gln Arg His Glu Gly Asp					
	725		730		735
Leu Lys Glu Lys Glu Arg Leu Val Arg Met Met Gly Asn Lys Glu Val					
	740		745		750
Tyr Gln Ala Arg Val Val Ser His Arg Gln Ala Glu Phe Asn Arg Leu					
	755		760		765
Arg Arg Glu Arg Glu Glu Arg Ile Ser Arg Ile Leu Gln Ser Arg Arg					
	770		775		780
Gln Glu Arg Glu Lys Met Arg Lys Leu Lys Tyr Tyr Leu Lys Leu Glu					
785		790		795	800
Glu Glu Arg Gln Gln Lys Leu Arg Glu Ala Glu Glu Ala Arg Lys Arg					
	805		810		815
Glu Asp Ala Glu Arg Lys Lys Lys Glu Glu Glu Glu Arg Leu Arg Lys					
	820		825		830
Leu Glu Glu Ile Ala Glu Lys Gln Arg Gln Arg Glu Arg Glu Leu Glu					
	835		840		845
Glu Lys Glu Lys Gln Arg Arg Glu Ala Leu Leu Gly Arg Ala Ala Ala					

850 855 860
 Glu Pro Ala Pro Pro Ala Arg Pro Leu Glu Ser Gly Ser Ala Ala Pro
 865 870 875 880
 Ala Ala Ala Ala Ala Ala Ala Ala Pro Thr Pro Gly Lys Tyr Val
 885 890 895
 Pro Lys Phe Arg Arg Glu Arg Thr Glu Ser Ala Gly Ala Ala Pro Pro
 900 905 910
 Pro Glu Thr Asp Arg Trp Asn Ser Ser Ser Arg Pro Asp Gly Asp Arg
 915 920 925
 Trp Arg Ser Asp Asp Arg Arg Thr Ala Phe Gly Ser Gly Gly Gly Ser
 930 935 940
 Arg Ser Ser Ser Thr Trp Ser Ser Ser Arg Asn Ala Arg
 945 950 955

<210> 4748

<211> 177

<212> PRT

<213> Homo sapiens

<400> 4748

Met Glu Glu Asp Leu Pro Ser Lys Trp Lys Ala Lys Lys Lys Ala Gly
 1 5 10 15
 Leu Ala Ile Leu Val Ser Asp Lys Pro Asp Phe Lys Pro Thr Lys Ile
 20 25 30
 Lys Arg Asp Lys Glu Gly His Tyr Ile Val Val Lys Gly Ser Ile His
 35 40 45
 Gln Glu Asp Leu Thr Ile Leu Asn Ile Tyr Ala Pro Asn Thr Gly Ala
 50 55 60
 Pro Arg Ser Ile Lys Gln Val Leu Arg Asp Leu Arg Arg Asp Leu Asp
 65 70 75 80
 Ser His Thr Ile Ile Met Gly Asp Phe Asn Thr Pro Leu Ser Ile Leu
 85 90 95
 Asp Arg Ser Thr Arg Gln Lys Val Ile Lys Asp Ile Gln Asp Leu Asn
 100 105 110
 Ser Ala Leu His Gln Ala Asp Leu Ile Asp Ile Tyr Arg Thr Leu His

115 120 125
 His Lys Ser Arg Gln Tyr Ala Phe Phe Ser Ala Pro His Cys Thr Tyr
 130 135 140
 Ser Lys Ile Gly His Ile Ile Gly Ser Lys Thr Leu Leu Arg Lys Cys
 145 150 155 160
 Lys Arg Thr Glu Ile Thr Ala Asn Cys Leu Leu Asp Thr Val Gln Ser
 165 170 175
 Asn

<210> 4749

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4749

Met Tyr Cys Leu Lys Gln Phe Leu Pro Leu Cys Val Thr Cys Gly Leu
 1 5 10 15
 Ser Ile Val Pro Val Val Ile Ala Leu Ile Tyr Lys Cys Pro Leu Phe
 20 25 30
 Leu Ser Cys Asn Ile Phe Leu Val Thr Cys Val Thr Pro Ser Val Thr
 35 40 45
 Val His Leu Cys Ser Leu Tyr Lys His Asn Ser Ser Ser Ser Leu Cys
 50 55 60
 Pro Thr Pro Ser Leu Pro Phe Gly Phe Ala Cys Asn Val Phe Ile Cys
 65 70 75 80
 Val Arg Gln Ser Pro Thr Val Phe Leu Pro Cys Gly Ser Cys Phe Gly
 85 90 95
 Ser Leu Gln Met Ser Leu Pro Thr Ile Phe Leu Ala Ser Ser Arg Asp
 100 105 110
 His

<210> 4750

<211> 202

<212> PRT

<213> Homo sapiens

<400> 4750

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Met Thr Gly Ser Asn Ser His Ile Thr Ile Leu Ile Leu Asn Ala Asn
  1             5             10             15
Gly Leu Asn Ala Pro Ile Lys Arg His Arg Leu Thr Asn Trp Ile Lys
      20             25             30
Ser Gln Asp Pro Ser Val Cys Cys Ile Glu Glu Thr His Leu Met Cys
      35             40             45
Arg Asp Thr His Gly Leu Lys Ile Lys Gly Trp Arg Lys Ile Cys Gln
      50             55             60
Ala Asn Gly Lys Gln Lys Lys Glu Gly Val Ala Ile Leu Val Ser Asp
      65             70             75             80
Lys Thr Gly Phe Lys Pro Thr Lys Ile Lys Arg Asp Lys Glu Gly His
      85             90             95
Tyr Ile Met Val Lys Gly Ser Ile Gln Gln Glu Glu Leu Thr Val Leu
      100            105            110
Asn Ile Cys Ala Pro Asn Ile Gly Ala Pro Arg Phe Ile Lys Gln Val
      115            120            125
Leu Ser Asp Leu Gln Ser Asp Leu Asp Ser His Thr Ile Ile Met Gly
      130            135            140
Asp Phe Asn Thr Pro Leu Ser Thr Leu Asp Arg Ser Thr Arg Gln Lys
      145            150            155            160
Val Asn Lys Asp Ile Gln Glu Leu Asn Thr Ala Leu His Gln Ala Asp
      165            170            175
Leu Ile Asp Ile Tyr Arg Thr Leu His Pro Thr Ser Thr Glu Tyr Thr
      180            185            190
Phe Phe Ser Ala Pro His Leu Phe Gln Asn
      195            200

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<210> 4751

<211> 512

<212> PRT

<213> Homo sapiens

<400> 4751

Met Gln Lys Leu Leu Arg Pro Ser Ser Val Pro Phe Leu Ser Ile Ser
 1 5 10 15
 Val Thr Val Ala Thr Pro Phe Leu Ser Leu Pro Pro Lys Val Ala Asn
 20 25 30
 Gln Pro Met Ser Ala Ala Ala Ala Gly Ser Ser Leu Lys Arg Gln Leu
 35 40 45
 Ser Tyr Ser Arg Tyr Leu Ala Leu Ser Ser Thr Asn Thr Cys Ser Val
 50 55 60
 Cys Arg Cys Leu Ser Leu Thr His Thr His Ser His Pro Lys Asn Asn
 65 70 75 80
 Lys Thr Leu Leu Leu Leu Asn His Ser Arg Asn Arg Ser Leu His Ser
 85 90 95
 Ala Ser Glu Gly Ser Phe Ile Thr Gln Pro Asp Pro Val Glu Tyr Gly
 100 105 110
 Ser Leu Val Asp Ser Lys Glu Lys Pro Phe Asn Ser Arg Leu Asn Arg
 115 120 125
 Arg Gln Lys Gly Ser Thr Ser Ser Ser Pro Ala Pro Ser Asn Pro Asp
 130 135 140
 Leu Leu Ala Ile Pro Gly Val Gly Pro Arg Asn Phe Arg Lys Leu Val
 145 150 155 160
 Gln Lys Gly Ile Ala Gly Val Ala Gln Leu Lys Gln Leu Tyr Lys Asp
 165 170 175
 Lys Ser Val Asp Glu Glu Glu Leu Glu Asp Asn Ser Ser Ser Ser Val
 180 185 190
 Gln Lys Lys Arg Leu Thr Phe Cys Val Glu Gly Asn Ile Ser Val Gly
 195 200 205
 Lys Thr Thr Phe Leu Gln Arg Ile Ala Asn Glu Thr Ile Glu Leu Arg
 210 215 220
 Asp Leu Val Glu Val Val Pro Glu Pro Ile Ser Lys Trp Gln Asp Val
 225 230 235 240
 Gly Pro Asp His Phe Asn Ile Leu Asp Ala Phe Tyr Ala Glu Pro Gln
 245 250 255
 Arg Tyr Ala Tyr Thr Phe Gln Asn Tyr Val Phe Val Thr Arg Val Met

260	265	270
Gln Glu Arg Glu Ser Ser Ala Gly Ile Lys Pro Leu Arg Leu Met Glu		
275	280	285
Arg Ser Val Phe Ser Asp Arg Met Val Phe Val Arg Ala Val His Glu		
290	295	300
Ala Asn Trp Met Asn Gly Met Glu Ile Ser Ile Tyr Asp Ser Trp Phe		
305	310	315
Asp Pro Val Val Ser Ser Leu Pro Gly Leu Ile Pro Asp Gly Phe Ile		
325	330	335
Tyr Leu Arg Ala Ser Pro Asp Thr Cys His Lys Arg Met Met Leu Arg		
340	345	350
Lys Arg Thr Glu Glu Gly Gly Val Ser Leu Asp Tyr Leu Cys Asp Leu		
355	360	365
His Glu Lys His Glu Ser Trp Leu Phe Pro Ser Gln Ser Gly Asn His		
370	375	380
Gly Val Leu Ser Val Asn Gln Leu Pro His His Ile Asp Asn Ser Leu		
385	390	395
His Pro Asp Ile Arg Asp Arg Val Phe Tyr Leu Glu Gly Gly His Met		
405	410	415
His Ser Ser Ile Gln Lys Val Pro Ala Leu Val Leu Asp Cys Glu Pro		
420	425	430
Asn Ile Asp Phe Ser Lys Asp Ile Glu Ala Lys Arg Gln Tyr Ala Arg		
435	440	445
Gln Val Ala Glu Phe Phe Glu Phe Val Lys Lys Arg Asn Glu Val Ser		
450	455	460
Ser Lys Glu Gly Ser Ser Gln Ala Gln Pro Gln Val Leu Leu Pro His		
465	470	475
Glu Gly Gly Leu Trp Leu Pro Asp Gly Lys Pro Phe Pro Arg Glu Ala		
485	490	495
Leu Lys Ser Leu Asp Phe Arg Gln Ala Ala Thr Ser Phe Met Ser Gly		
500	505	510

<210> 4752

<211> 277

<212> PRT

<213> Homo sapiens

<400> 4752

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Met Phe Val Cys Val Thr Ser Ile Thr Val Ile Ile Val Ser Lys Asp
  1             5             10             15
Arg Glu Phe Cys Leu His Phe Val Met Asp Gly Ser Phe Leu Cys Ser
      20             25             30
Gln Thr Gly Lys Lys Leu Met Ala Lys Cys Arg Met Leu Ile Gln Glu
      35             40             45
Asn Gln Glu Leu Gly Arg Gln Leu Ser Gln Gly Arg Ile Ala Gln Leu
      50             55             60
Glu Ala Glu Leu Ala Leu Gln Lys Lys Tyr Ser Glu Glu Leu Lys Ser
      65             70             75             80
Ser Gln Asp Glu Leu Asn Asp Phe Ile Ile Gln Leu Asp Glu Glu Val
      85             90             95
Glu Gly Met Gln Ser Thr Ile Leu Val Leu Gln Gln Gln Leu Lys Glu
      100            105            110
Thr Arg Gln Gln Leu Ala Gln Tyr Gln Gln Gln Gln Ser Gln Ala Ser
      115            120            125
Ala Pro Ser Thr Ser Arg Thr Thr Ala Ser Glu Pro Val Glu Gln Ser
      130            135            140
Glu Ala Thr Ser Lys Asp Cys Ser Arg Leu Thr Asn Gly Pro Ser Asn
      145            150            155            160
Gly Ser Ser Ser Arg Gln Arg Thr Ser Gly Ser Gly Phe His Arg Glu
      165            170            175
Gly Asn Thr Thr Glu Asp Asp Phe Pro Ser Ser Pro Gly Asn Gly Asn
      180            185            190
Lys Ser Ser Asn Ser Ser Glu Glu Arg Thr Gly Arg Gly Gly Ser Gly
      195            200            205
Tyr Val Asn Gln Leu Ser Ala Gly Tyr Glu Ser Val Asp Ser Pro Thr
      210            215            220
Gly Ser Glu Asn Ser Leu Thr His Gln Ser Asn Asp Thr Asp Ser Ser
      225            230            235            240
His Asp Pro Gln Glu Glu Lys Ala Val Ser Gly Lys Gly Asn Arg Thr
      245            250            255

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Val Gly Ser Arg His Val Gln Asn Gly Leu Asp Ser Ser Val Asn Val
 260 265 270
 Gln Gly Ser Val Leu
 275

<210> 4753

<211> 528

<212> PRT

<213> Homo sapiens

<400> 4753

Met Ala Val Gly Gln Leu Val Pro Ser Asn Leu Phe Leu Asn His Ser
 1 5 10 15
 Ala Ala Thr Thr Leu Ile Pro Thr Ser Thr Pro Pro Arg His Arg His
 20 25 30
 Leu Leu Cys Ile Ser Ser Ala Asn His Thr Thr Ala Thr Asp Asn Asp
 35 40 45
 Ser Pro Phe Pro Ser Phe Gly Arg Val Lys Thr Leu Leu Val His Arg
 50 55 60
 Arg Arg Lys Asp Gln Ser His Arg Arg Ala Val Gln Leu Glu Asp Asp
 65 70 75 80
 Asn Asp Asp Asp Ile Ala Pro Arg Pro Arg Arg Ser Gln Ser Arg Ser
 85 90 95
 Arg Gly Gly Glu Arg Trp Asp Met Ile Pro Asn Tyr Thr Pro Gln Ser
 100 105 110
 Lys Ser Ala Thr Asp Thr Lys Phe Phe Ser Leu Lys Ser Phe Lys Glu
 115 120 125
 Ile Gly Cys Ser Glu Tyr Met Ile Glu Ser Leu Gln Lys Leu Leu Leu
 130 135 140
 Ser Arg Pro Ser His Val Gln Ala Met Ala Phe Ala Pro Val Ile Ser
 145 150 155 160
 Gly Lys Thr Cys Val Ile Ala Asp Gln Ser Gly Ser Gly Lys Thr Leu
 165 170 175
 Ala Tyr Leu Ala Pro Ile Ile Gln Leu Leu Arg Leu Glu Glu Leu Glu
 180 185 190

Gly Arg Ser Ser Lys Ser Ser Ser Gln Ala Pro Arg Val Leu Val Leu
 195 200 205
 Ala Pro Thr Ala Glu Leu Ala Ser Gln Val Leu Asp Asn Cys Arg Ser
 210 215 220
 Leu Ser Lys Ser Gly Val Pro Phe Lys Ser Met Val Val Thr Gly Gly
 225 230 235 240
 Phe Arg Gln Lys Thr Gln Leu Glu Asn Leu Gln Gln Gly Val Asp Val
 245 250 255
 Leu Ile Ala Thr Pro Gly Arg Phe Leu Phe Leu Ile His Glu Gly Phe
 260 265 270
 Leu Gln Leu Thr Asn Leu Arg Cys Ala Ile Leu Asp Glu Val Asp Ile
 275 280 285
 Leu Phe Gly Asp Glu Asp Phe Glu Val Ala Leu Gln Ser Leu Ile Asn
 290 295 300
 Ser Ser Pro Val Asp Thr Gln Tyr Leu Phe Val Thr Ala Thr Leu Pro
 305 310 315 320
 Lys Asn Val Tyr Thr Lys Leu Val Glu Val Phe Pro Asp Cys Glu Met
 325 330 335
 Ile Met Gly Pro Gly Met His Arg Ile Ser Ser Arg Leu Gln Glu Ile
 340 345 350
 Ile Val Asp Cys Ser Gly Glu Asp Gly Gln Glu Lys Thr Pro Asp Thr
 355 360 365
 Ala Phe Leu Asn Lys Lys Thr Ala Leu Leu Gln Leu Val Glu Glu Asn
 370 375 380
 Pro Val Pro Arg Thr Ile Val Phe Cys Asn Lys Ile Glu Thr Cys Arg
 385 390 395 400
 Lys Val Glu Asn Leu Leu Lys Arg Phe Asp Arg Lys Gly Asn His Val
 405 410 415
 Gln Val Leu Pro Phe His Ala Ala Met Thr Gln Glu Ser Arg Leu Ala
 420 425 430
 Ser Met Glu Glu Phe Thr Arg Ser Pro Ser Lys Gly Val Ser Gln Phe
 435 440 445
 Met Val Cys Thr Asp Arg Ala Ser Arg Gly Ile Asp Phe Thr Arg Val
 450 455 460
 Asp His Val Ile Leu Phe Asp Phe Pro Arg Asp Pro Ser Glu Tyr Val
 465 470 475 480

Arg Arg Val Gly Arg Thr Ala Arg Gly Ala Lys Gly Val Gly Lys Ala
 485 490 495
 Phe Ile Phe Val Val Gly Lys Gln Val Ser Leu Ala Arg Lys Ile Met
 500 505 510
 Glu Arg Asn Gln Lys Gly His Pro Leu His Asp Val Pro Ser Ala Tyr
 515 520 525

<210> 4754

<211> 238

<212> PRT

<213> Homo sapiens

<400> 4754

Met Cys Gly Leu Ser Phe Met Leu Phe Arg Ala Cys Leu Lys Met Asp
 1 5 10 15
 Leu Gly Val Phe Ile Cys Val Phe Ile Ser Phe Ser Pro Leu Phe Lys
 20 25 30

 Ser Thr Ala Asp Cys Pro Asp Ala Val Pro Ser Ser Ala Glu Thr Gly
 35 40 45
 Gly Thr Asn Tyr Leu Ala Pro Gly Gly Leu Ser Asp Ser Gln Leu Leu
 50 55 60
 Leu Glu Pro Gly Asp Arg Ser His Trp Cys Val Val Ala Tyr Trp Glu
 65 70 75 80
 Glu Lys Thr Arg Val Gly Arg Leu Tyr Cys Val Gln Glu Pro Ser Leu
 85 90 95
 Asp Ile Phe Tyr Asp Leu Pro Gln Gly Asn Gly Phe Cys Leu Gly Gln
 100 105 110
 Leu Asn Ser Asp Asn Lys Ser Gln Leu Val Gln Lys Val Arg Ser Lys
 115 120 125
 Ile Gly Cys Gly Ile Gln Leu Thr Arg Glu Val Asp Gly Val Trp Val
 130 135 140
 Tyr Asn Arg Ser Ser Tyr Pro Ile Phe Ile Lys Ser Ala Thr Leu Asp
 145 150 155 160
 Asn Pro Asp Ser Arg Thr Leu Leu Val His Lys Val Phe Pro Gly Phe

	165		170		175										
Ser	Ile	Lys	Ala	Phe	Asp	Tyr	Glu	Lys	Ala	Tyr	Ser	Leu	Gln	Arg	Pro
	180		185		190										
Asn	Asp	His	Glu	Phe	Met	Gln	Gln	Pro	Trp	Thr	Gly	Phe	Thr	Val	Gln
	195		200		205										
Ile	Ser	Phe	Val	Lys	Gly	Trp	Gly	Gln	Cys	Tyr	Thr	Arg	Gln	Phe	Ile
	210		215		220										
Ser	Ser	Cys	Pro	Cys	Trp	Leu	Glu	Val	Ile	Phe	Asn	Ser	Arg		
225			230		235										

<210> 4755

<211> 307

<212> PRT

<213> Homo sapiens

<400> 4755

Met	Gln	Ala	Leu	Ser	Thr	Val	Pro	Leu	Asp	Trp	Val	Thr	Val	Pro	Lys
1			5					10						15	
Leu	Gln	Glu	Cys	Gly	Ala	Arg	Pro	Ala	Met	Glu	Lys	Pro	Thr	Arg	Val
		20						25					30		
Val	Gly	Gly	Phe	Gly	Ala	Ala	Ser	Gly	Glu	Val	Pro	Trp	Gln	Val	Ser
	35						40					45			
Leu	Lys	Glu	Gly	Ser	Arg	His	Phe	Cys	Gly	Ala	Thr	Val	Val	Gly	Asp
	50					55					60				
Arg	Trp	Leu	Leu	Ser	Ala	Ala	His	Cys	Phe	Asn	His	Thr	Lys	Val	Glu
	65			70						75				80	
Gln	Val	Arg	Ala	His	Leu	Gly	Thr	Ala	Ser	Leu	Leu	Gly	Leu	Gly	Gly
			85					90					95		
Ser	Pro	Val	Lys	Ile	Gly	Leu	Arg	Arg	Val	Val	Leu	His	Pro	Leu	Tyr
	100						105				110				
Asn	Pro	Gly	Ile	Leu	Asp	Phe	Asp	Leu	Ala	Val	Leu	Glu	Leu	Ala	Ser
	115						120				125				
Pro	Leu	Ala	Phe	Asn	Lys	Tyr	Ile	Gln	Pro	Val	Cys	Leu	Pro	Leu	Ala
	130						135				140				
Ile	Gln	Lys	Phe	Pro	Val	Gly	Arg	Lys	Cys	Met	Ile	Ser	Gly	Trp	Gly

145 150 155 160
 Asn Thr Gln Glu Gly Asn Ala Thr Lys Pro Glu Leu Leu Gln Lys Ala
 165 170 175
 Ser Val Gly Ile Ile Asp Gln Lys Pro Cys Ser Val Leu Tyr Asn Phe
 180 185 190
 Ser Leu Thr Asp Arg Met Ile Cys Ala Gly Phe Leu Glu Gly Lys Val
 195 200 205
 Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Ala Cys Glu Glu Ala
 210 215 220
 Pro Gly Val Phe Tyr Leu Ala Gly Ile Val Ser Trp Gly Ile Gly Cys
 225 230 235 240
 Ala Gln Val Lys Lys Pro Gly Val Tyr Thr Arg Ile Thr Arg Leu Lys
 245 250 255
 Gly Trp Ile Leu Glu Ile Met Ser Ser Gln Pro Leu Pro Met Ser Pro
 260 265 270
 Pro Ser Thr Thr Arg Met Leu Ala Thr Thr Ser Pro Arg Thr Thr Ala
 275 280 285
 Gly Leu Thr Val Pro Gly Ala Thr Pro Ser Arg Pro Thr Pro Gly Leu
 290 295 300
 Pro Ala Gly
 305

<210> 4756

<211> 583

<212> PRT

<213> Homo sapiens

<400> 4756

Met Ser Val Ile Val Lys Thr Gln Glu Gly Asp Ile Leu Leu Phe Cys
 1 5 10 15
 Lys Gly Ala Asp Ser Ala Val Phe Pro Arg Val Gln Asn His Glu Ile
 20 25 30
 Glu Leu Thr Lys Val His Val Glu Arg Asn Ala Met Asp Gly Tyr Arg
 35 40 45
 Thr Leu Cys Val Ala Phe Lys Glu Ile Ala Pro Asp Asp Tyr Glu Arg

50	55	60	
Ile Asn Arg Gln Leu Ile Glu Ala Lys Met Ala Leu Gln Asp Arg Glu			
65	70	75	80
Glu Lys Met Glu Lys Val Phe Asp Asp Ile Glu Thr Asn Met Asn Leu			
	85	90	95
Ile Gly Ala Thr Ala Val Glu Asp Lys Leu Gln Asp Gln Ala Ala Glu			
100	105	110	
Thr Ile Glu Ala Leu His Ala Ala Gly Leu Lys Val Trp Val Leu Thr			
115	120	125	
Gly Asp Lys Met Glu Thr Ala Lys Ser Thr Cys Tyr Ala Cys Arg Leu			
130	135	140	
Phe Gln Thr Asn Thr Glu Leu Leu Glu Leu Thr Thr Lys Thr Ile Glu			
145	150	155	160
Glu Ser Glu Arg Lys Glu Asp Arg Leu His Glu Leu Leu Ile Glu Tyr			
	165	170	175
Arg Lys Lys Leu Leu His Glu Phe Pro Lys Ser Thr Arg Ser Phe Lys			
180	185	190	
Lys Ala Trp Thr Glu His Gln Glu Tyr Gly Leu Ile Ile Asp Gly Ser			
195	200	205	
Thr Leu Ser Leu Ile Leu Asn Ser Ser Gln Asp Ser Ser Ser Asn Asn			
210	215	220	
Tyr Lys Ser Ile Phe Leu Gln Ile Cys Met Lys Cys Thr Ala Val Leu			
225	230	235	240
Cys Cys Arg Met Ala Pro Leu Gln Lys Ala Gln Ile Val Arg Met Val			
	245	250	255
Lys Asn Leu Lys Gly Ser Pro Ile Thr Leu Ser Ile Gly Asp Gly Ala			
260	265	270	
Asn Asp Val Ser Met Ile Leu Glu Ser His Val Gly Ile Gly Ile Lys			
275	280	285	
Gly Lys Glu Gly Arg Gln Ala Ala Arg Asn Ser Asp Tyr Ser Val Pro			
290	295	300	
Lys Phe Lys His Leu Lys Lys Leu Leu Leu Ala His Gly His Leu Tyr			
305	310	315	320
Tyr Val Arg Ile Ala His Leu Val Gln Tyr Phe Phe Tyr Lys Asn Leu			
	325	330	335
Cys Phe Ile Leu Pro Gln Phe Leu Tyr Gln Phe Phe Cys Gly Phe Ser			

340	345	350
Gln Gln Pro Leu Tyr Asp Ala Ala Tyr Leu Thr Met Tyr Asn Ile Cys		
355	360	365
Phe Thr Ser Leu Pro Ile Leu Ala Tyr Ser Leu Leu Glu Gln His Ile		
370	375	380
Asn Ile Asp Thr Leu Thr Ser Asp Pro Arg Leu Tyr Met Lys Ile Ser		
385	390	395
Gly Asn Ala Met Leu Gln Leu Gly Pro Phe Leu Tyr Trp Thr Phe Leu		
405	410	415
Ala Ala Phe Glu Gly Thr Val Phe Phe Phe Gly Thr Tyr Phe Leu Phe		
420	425	430
Gln Thr Ala Ser Leu Glu Glu Asn Gly Lys Val Tyr Gly Asn Trp Thr		
435	440	445
Phe Gly Thr Ile Val Phe Thr Val Leu Val Phe Thr Val Thr Leu Lys		
450	455	460
Leu Ala Leu Asp Thr Arg Phe Trp Thr Trp Ile Asn His Phe Val Ile		
465	470	475
Trp Gly Ser Leu Ala Phe Tyr Val Phe Phe Ser Phe Phe Trp Gly Gly		
485	490	495
Ile Ile Trp Pro Phe Leu Lys Gln Gln Arg Met Tyr Phe Val Phe Ala		
500	505	510
Gln Met Leu Ser Ser Val Ser Thr Trp Leu Ala Ile Ile Leu Leu Ile		
515	520	525
Phe Ile Ser Leu Phe Pro Glu Ile Leu Leu Ile Val Leu Lys Asn Val		
530	535	540
Arg Arg Arg Ser Ala Arg Arg Asn Leu Ser Cys Arg Arg Ala Ser Asp		
545	550	555
Ser Leu Ser Ala Arg Pro Ser Val Arg Pro Leu Leu Leu Arg Thr Phe		
565	570	575
Ser Asp Glu Ser Asn Val Leu		
580		

<210> 4757

<211> 171

<212> PRT

<213> Homo sapiens

<400> 4757

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Met His Leu Trp Arg Tyr Pro Ser Leu Ser Ile His Gly Ile Glu Gly
 1             5             10             15
Ala Phe Asp Glu Pro Gly Thr Lys Thr Val Ile Pro Gly Arg Val Ile
      20             25             30
Gly Lys Phe Ser Ile Arg Leu Val Pro His Met Asn Val Ser Ala Val
      35             40             45
Glu Lys Gln Val Thr Arg His Leu Glu Asp Val Phe Ser Lys Arg Asn
      50             55             60
Ser Ser Asn Lys Met Val Val Ser Met Thr Leu Gly Leu His Pro Trp
      65             70             75             80
Ile Ala Asn Ile Asp Asp Thr Gln Tyr Leu Ala Ala Lys Arg Ala Ile
      85             90             95
Arg Thr Val Phe Gly Thr Glu Pro Asp Met Ile Arg Asp Gly Ser Thr
      100            105            110
Ile Pro Ile Ala Lys Met Phe Gln Glu Ile Val His Lys Ser Val Val
      115            120            125
Leu Ile Pro Leu Gly Ala Val Asp Asp Gly Glu His Ser Gln Asn Glu
      130            135            140
Lys Ile Asn Arg Ser Ala Asp Ala Cys Ala Met Cys Leu Ser Leu Leu
      145            150            155            160
Pro Leu Leu His Thr Pro Gly Ser Thr Arg Gly
      165            170

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<210> 4758

<211> 446

<212> PRT

<213> Homo sapiens

<400> 4758

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Met Leu Gly Gly Val Val Glu Leu Ala Ala Ala Ser Ser Phe Pro Leu
 1             5             10             15
Leu Glu Gln Phe Ala Gly Asp Gly Phe His Ala Asp Gly Asp Asp Val

```

	20		25		30
Leu Thr Glu	Leu Cys Ala	Pro Asp Gly	Ala Pro Pro	Gly Val Val	Pro
35		40		45	
Val Leu Ser	Ala His Ser	Pro Ser Leu	Gly Ser Glu	Tyr Phe Ile	Arg
50		55		60	
Leu Glu Glu	Ala Ala Pro	Ala Thr Gly	His Asp Pro	Asp Cys Ala	Gly
65		70		75	80
Cys Ala Pro	Ser Pro Pro	Ala Ile Ala	Asp Gln Asp	Asp Asp Ser	Asp
	85		90		95
Gly Ser Thr	Ala Ala Ser	Leu Ala Met	Glu Pro Leu	Leu Gly His	Gly
100		105		110	
Pro Pro Val	Asp Val Pro	Trp Gly Arg	Gly Asp His	Tyr Pro Arg	Arg
115		120		125	
Ser Leu Ala	Arg Asp Pro	Leu Cys Pro	Ser Arg Ser	Pro Ser Pro	Ser
130		135		140	
Ala Gly Pro	Leu Ser Leu	Ala Glu Gly	Gly Ala Glu	Asp Ala Asp	Trp
145		150		155	160
Gly Val Ala	Ala Phe Cys	Pro Ala Phe	Phe Glu Asp	Pro Leu Gly	Thr
	165		170		175
Ser Pro Leu	Gly Ser Ser	Gly Ala Pro	Pro Pro Leu	Pro Leu Thr	Gly Glu
180		185		190	
Asp Glu Leu	Glu Glu Val	Gly Ala Arg	Arg Ala Ala	Gln Arg Gly	His
195		200		205	
Trp Arg Ser	Asn Val Ser	Ala Asn Asn	Asn Ser Gly	Ser Arg Cys	Pro
210		215		220	
Glu Ser Trp	Asp Pro Val	Ser Ala Gly	Gly His Ala	Glu Gly Cys	Pro
225		230		235	240
Ser Pro Lys	Gln Thr Pro	Arg Ala Ser	Pro Glu Pro	Gly Tyr Pro	Gly
	245		250		255
Glu Pro Leu	Leu Gly Leu	Gln Ala Ala	Ser Ala Gln	Glu Pro Gly	Cys
260		265		270	
Cys Pro Gly	Leu Pro His	Leu Cys Ser	Ala Gln Gly	Leu Ala Pro	Ala
275		280		285	
Pro Cys Leu	Val Thr Pro	Ser Trp Thr	Glu Thr Ala	Ser Ser Gly	Gly
290		295		300	

Asp His Pro Gln Ala Glu Pro Lys Leu Ala Thr Glu Ala Glu Gly Thr
 305 310 315 320
 Thr Gly Pro Arg Leu Pro Leu Pro Ser Val Pro Ser Pro Ser Gln Glu
 325 330 335
 Gly Ala Pro Leu Pro Ser Glu Glu Ala Ser Ala Pro Asp Ala Pro Asp
 340 345 350
 Ala Leu Pro Asp Ser Pro Thr Pro Ala Thr Gly Gly Glu Val Ser Ala
 355 360 365
 Ile Lys Leu Ala Ser Ala Leu Asn Gly Ser Ser Ser Ser Pro Glu Val
 370 375 380
 Glu Ala Pro Ser Ser Glu Asp Glu Asp Thr Ala Glu Ala Thr Ser Gly
 385 390 395 400
 Ile Phe Thr Asp Thr Ser Ser Asp Gly Leu Gln Ala Arg Arg Pro Asp
 405 410 415
 Val Val Pro Ala Phe Arg Ser Leu Gln Lys Gln Trp Pro Gln Arg Glu
 420 425 430
 Glu Ser Leu Pro Arg Leu Cys Leu Leu Leu Arg Pro Arg Gly
 435 440 445

<210> 4759

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4759

Met Val Thr Lys Ala Thr Phe His Gln Lys Thr Gln Cys Trp Ala Cys
 1 5 10 15
 Glu Glu Gly Val Gln Gln Ser Phe His Cys Pro Cys Arg Leu Gln Ala
 20 25 30
 Ala Ala Ser Val Glu Arg Tyr Thr Glu Leu Leu Lys Glu Phe Leu Phe
 35 40 45
 Lys Val Gln Ser Ser Asp Trp Met Pro Cys Trp Ile Pro Leu Leu Pro
 50 55 60
 Gln Ala Leu Ile Thr Leu Ser Ser Cys Ser Leu Gly Lys Cys Thr Phe
 65 70 75 80

Tyr Thr Asn Val Arg Gln Phe Pro Gln Leu Pro Leu Leu Asp Ile Lys

85

90

95

Glu Phe Thr Phe Leu Thr Ile Phe Gln Ser

100

105

<210> 4760

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4760

Met Tyr Leu Leu Ile Met Glu Phe Met Ser Phe Pro Ser Phe Ala Trp

1

5

10

15

Pro Arg Phe Phe Phe Ser Leu Lys Phe Leu Leu Arg Cys Tyr Leu Gly

20

25

30

Cys Leu His Tyr Lys Gln Ala Ala Leu Pro Pro Leu Phe Val Val Thr

35

40

45

Gly Glu Lys Pro Tyr Lys Cys Thr Trp Glu Gly Cys Asp Trp Arg Phe

50

55

60

Ala Arg Ser Asp Glu Leu Thr Arg His Tyr Arg Lys His Thr Gly Ala

65

70

75

80

Lys Pro Phe Gln Cys Gly Val Cys Asn Arg Ser Phe Ser Arg Ser Asp

85

90

95

His Leu Ala Leu His Met Lys Arg His Gln Asn

100

105

<210> 4761

<211> 667

<212> PRT

<213> Homo sapiens

<400> 4761

Met Glu Asp Leu Ser Ser Pro Asp Ser Thr Leu Leu Gln Gly Gly His

1

5

10

15

Asn Leu Leu Ser Ser Ala Ser Phe Gln Glu Ala Val Thr Phe Lys Asp
 20 25 30
 Val Ile Val Asp Phe Thr Gln Glu Glu Trp Lys Gln Leu Asp Pro Gly
 35 40 45
 Gln Arg Asp Leu Phe Arg Asp Val Thr Leu Glu Asn Tyr Thr His Leu
 50 55 60
 Val Ser Ile Gly Leu Gln Val Ser Lys Pro Asp Val Ile Ser Gln Leu
 65 70 75 80
 Glu Gln Gly Thr Glu Pro Trp Ile Met Glu Pro Ser Ile Pro Val Gly
 85 90 95
 Thr Cys Ala Asp Trp Glu Thr Arg Leu Glu Asn Ser Val Ser Ala Pro
 100 105 110
 Glu Pro Asp Ile Ser Glu Glu Glu Leu Ser Pro Glu Val Ile Val Glu
 115 120 125
 Lys His Lys Arg Asp Asp Ser Trp Ser Ser Asn Leu Leu Glu Ser Trp
 130 135 140
 Glu Tyr Glu Gly Ser Leu Glu Arg Gln Gln Ala Asn Gln Gln Thr Leu
 145 150 155 160
 Pro Lys Glu Ile Lys Val Thr Glu Lys Thr Ile Pro Ser Trp Glu Lys
 165 170 175
 Gly Pro Val Asn Asn Glu Phe Gly Lys Ser Val Asn Val Ser Ser Asn
 180 185 190
 Leu Val Thr Gln Glu Pro Ser Pro Glu Glu Thr Ser Thr Lys Arg Ser
 195 200 205
 Ile Lys Gln Asn Ser Asn Pro Val Lys Lys Glu Lys Ser Cys Lys Cys
 210 215 220
 Asn Glu Cys Gly Lys Ala Phe Ser Tyr Cys Ser Ala Leu Ile Arg His
 225 230 235 240
 Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Glu
 245 250 255
 Lys Ala Phe Ser Arg Ser Glu Asn Leu Ile Asn His Gln Arg Ile His
 260 265 270
 Thr Gly Asp Lys Pro Tyr Lys Cys Asp Gln Cys Gly Lys Gly Phe Ile
 275 280 285
 Glu Gly Pro Ser Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys
 290 295 300

Pro Tyr Lys Cys Asp Glu Cys Gly Lys Ala Phe Ser Gln Arg Thr His
 305 310 315 320
 Leu Val Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Thr Cys
 325 330 335
 Asn Glu Cys Gly Lys Ala Phe Ser Gln Arg Gly His Phe Met Glu His
 340 345 350
 Gln Lys Ile His Thr Gly Glu Lys Pro Phe Lys Cys Asp Glu Cys Asp
 355 360 365
 Lys Thr Phe Thr Arg Ser Thr His Leu Thr Gln His Gln Lys Ile His
 370 375 380
 Thr Gly Glu Lys Thr Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Asn
 385 390 395 400
 Gly Pro Ser Thr Phe Ile Arg His His Met Ile His Thr Gly Glu Lys
 405 410 415
 Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln His Ser Asn
 420 425 430
 Leu Thr Gln His Gln Lys Thr His Thr Gln Glu Lys Ala Tyr Glu Cys
 435 440 445
 Lys Glu Cys Gly Lys Ala Phe Ile Arg Ser Ser Ser Leu Ala Lys His
 450 455 460
 Glu Arg Ile His Thr Gly Glu Lys Pro Tyr Gln Cys His Glu Cys Gly
 465 470 475 480
 Lys Thr Phe Ser Tyr Gly Ser Ser Leu Ile Gln His Arg Lys Ile His
 485 490 495
 Thr Gly Glu Arg Pro Tyr Lys Cys Asn Glu Cys Gly Arg Ala Phe Asn
 500 505 510
 Gln Asn Ile His Leu Thr Gln His Lys Arg Ile His Thr Gly Ala Lys
 515 520 525
 Pro Tyr Glu Cys Ala Glu Cys Gly Lys Ala Phe Arg His Cys Ser Ser
 530 535 540
 Leu Ala Gln His Gln Lys Thr His Thr Glu Glu Lys Pro Tyr Gln Cys
 545 550 555 560
 Asn Lys Cys Glu Lys Thr Phe Ser Gln Ser Ser His Leu Thr Gln His
 565 570 575
 Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Asp
 580 585 590

Lys	Ala	Phe	Ser	Arg	Ser	Thr	His	Leu	Thr	Glu	His	Gln	Asn	Thr	His
595				600				605							
Thr	Gly	Glu	Lys	Pro	Tyr	Asn	Cys	Asn	Glu	Cys	Arg	Lys	Thr	Phe	Ser
610				615				620							
Gln	Ser	Thr	Tyr	Leu	Ile	Gln	His	Gln	Arg	Ile	His	Ser	Gly	Glu	Lys
625				630				635				640			
Pro	Phe	Gly	Cys	Asn	Asp	Cys	Gly	Lys	Ser	Phe	Arg	Tyr	Arg	Ser	Ala
645				650				655							
Leu	Asn	Lys	His	Gln	Arg	Leu	His	Pro	Gly	Ile					
660				665											

<210> 4762

<211> 460

<212> PRT

<213> Homo sapiens

<400> 4762

Met	Glu	Val	Leu	Glu	Ser	Gly	Glu	Gln	Gly	Val	Leu	Gln	Trp	Asp	Arg
1				5					10					15	
Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
		35					40					45			
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
	50					55					60				
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
65				70					75					80	
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
				85					90					95	
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Glu
		100						105					110		
Lys	Trp	Tyr	Leu	Ser	Thr	Asp	Phe	Pro	Ser	Thr	Ser	Ile	Lys	Thr	Glu
		115					120					125			
Pro	Val	Thr	Asp	Glu	Pro	Pro	Pro	Gly	Leu	Val	Pro	Ser	Val	Thr	Leu
	130					135					140				

Thr Ile Thr Ala Ile Ser Thr Pro Leu Glu Lys Glu Glu Pro Pro Leu
 145 150 155 160
 Glu Met Asn Thr Gly Val Asp Ser Ser Cys Gln Thr Ile Ile Pro Lys
 165 170 175
 Ile Lys Leu Glu Pro His Glu Val Asp Gln Phe Leu Asn Phe Ser Pro
 180 185 190
 Lys Glu Ala Pro Val Asp His Leu His Leu Pro Pro Thr Pro Pro Ser
 195 200 205
 Ser His Gly Ser Asp Ser Glu Gly Ser Leu Ser Pro Asn Pro Arg Leu
 210 215 220
 His Pro Phe Ser Leu Pro Gln Thr His Ser Pro Ser Arg Ala Ala Pro
 225 230 235 240
 Arg Ala Pro Ser Ala Leu Ser Ser Ser Pro Leu Leu Thr Ala Pro His
 245 250 255
 Lys Leu Gln Gly Ser Gly Pro Leu Val Leu Thr Glu Glu Glu Lys Arg
 260 265 270
 Thr Leu Ile Ala Glu Gly Tyr Pro Ile Pro Thr Lys Leu Pro Leu Ser
 275 280 285
 Lys Ser Glu Glu Lys Ala Leu Lys Lys Ile Arg Arg Lys Ile Lys Asn
 290 295 300
 Lys Ile Ser Ala Gln Glu Ser Arg Arg Lys Lys Lys Glu Tyr Met Asp
 305 310 315 320
 Ser Leu Glu Lys Lys Val Glu Ser Cys Ser Thr Glu Asn Leu Glu Leu
 325 330 335
 Arg Lys Lys Val Glu Val Leu Glu Asn Thr Asn Arg Thr Leu Leu Gln
 340 345 350
 Gln Leu Gln Lys Leu Gln Thr Leu Val Met Gly Lys Val Ser Arg Thr
 355 360 365
 Cys Lys Leu Ala Gly Thr Gln Thr Gly Thr Cys Leu Met Val Val Val
 370 375 380
 Leu Cys Phe Ala Val Ala Phe Gly Ser Phe Phe Gln Gly Tyr Gly Pro
 385 390 395 400
 Tyr Pro Ser Ala Thr Lys Met Ala Leu Pro Ser Gln His Ser Leu Gln
 405 410 415
 Glu Pro Tyr Thr Ala Ser Val Gly Lys Thr Ala Cys Gly Lys Leu Gly
 420 425 430

<210> 4763
<211> 443
<212> PRT
<213> Homo sapiens

<400> 4763																	
Met	Glu	His	Val	Gln	Gly	Arg	Ile	Phe	Arg	Asp	Leu	Thr	Ile	Pro	Gly		
1				5					10					15			
Leu	Ser	Pro	Ala	Glu	Arg	Ser	Ala	Ile	Tyr	Val	Ala	Thr	Val	Glu	Thr		
			20					25					30				
Leu	Ala	Gln	Leu	His	Ser	Leu	Asn	Ile	Gln	Ser	Leu	Gln	Leu	Glu	Gly		
		35					40					45					
Tyr	Gly	Ile	Gly	Ala	Gly	Tyr	Cys	Lys	Arg	Gln	Val	Ser	Thr	Trp	Thr		
	50					55					60						
Lys	Gln	Tyr	Gln	Ala	Ala	Ala	His	Gln	Asp	Ile	Pro	Ala	Met	Gln	Gln		
65				70					75					80			
Leu	Ser	Glu	Trp	Leu	Met	Lys	Asn	Leu	Pro	Asp	Asn	Asp	Asn	Glu	Glu		
			85						90				95				
Asn	Leu	Ile	His	Gly	Asp	Phe	Arg	Leu	Asp	Asn	Ile	Val	Phe	His	Pro		
		100						105				110					
Lys	Glu	Cys	Arg	Val	Ile	Ala	Val	Leu	Asp	Trp	Glu	Leu	Ser	Thr	Ile		
	115					120					125						
Gly	His	Pro	Leu	Ser	Asp	Leu	Ala	His	Phe	Ser	Leu	Phe	Tyr	Phe	Trp		
	130					135					140						
Pro	Arg	Thr	Val	Pro	Met	Ile	Asn	Gln	Gly	Ser	Tyr	Ser	Glu	Asn	Ser		
145				150					155				160				
Gly	Ile	Pro	Ser	Met	Glu	Glu	Leu	Ile	Ser	Ile	Tyr	Cys	Arg	Cys	Arg		
		165						170				175					
Gly	Ile	Asn	Ser	Ile	Leu	Pro	Asn	Trp	Asn	Phe	Phe	Leu	Ala	Leu	Ser		
	180						185					190					

Tyr Phe Lys Met Ala Gly Ile Ala Gln Gly Val Tyr Ser Arg Tyr Leu
 195 200 205
 Leu Gly Asn Asn Ser Ser Glu Asp Ser Phe Leu Phe Ala Asn Ile Val
 210 215 220
 Gln Pro Leu Ala Glu Thr Gly Leu Gln Leu Ser Lys Arg Thr Phe Ser
 225 230 235 240
 Thr Val Leu Pro Gln Ile Asp Thr Thr Gly Gln Leu Phe Val Gln Thr
 245 250 255
 Arg Lys Gly Gln Glu Val Leu Ile Lys Val Lys His Phe Met Lys Gln
 260 265 270
 His Ile Leu Pro Ala Glu Lys Glu Val Thr Glu Phe Tyr Val Gln Asn
 275 280 285
 Glu Asn Ser Val Asp Lys Trp Gly Lys Pro Leu Val Ile Asp Lys Leu
 290 295 300
 Lys Glu Met Ala Lys Val Glu Gly Leu Trp Asn Leu Phe Leu Pro Ala
 305 310 315 320
 Val Ser Gly Leu Ser His Val Asp Tyr Ala Leu Ile Ala Glu Glu Thr
 325 330 335
 Gly Lys Cys Phe Phe Ala Pro Asp Val Phe Asn Cys Gln Ala Pro Asp
 340 345 350
 Thr Gly Asn Met Glu Val Leu His Leu Tyr Gly Ser Glu Glu Gln Lys
 355 360 365
 Lys Gln Trp Leu Glu Pro Leu Leu Gln Gly Asn Ile Thr Ser Cys Phe
 370 375 380
 Cys Met Thr Glu Pro Asp Val Ala Ser Ser Asp Ala Thr Asn Ile Glu
 385 390 395 400
 Cys Ser Ile Gln Arg Asp Glu Asp Ser Tyr Val Ile Asn Gly Lys Lys
 405 410 415
 Trp Trp Ser Ser Gly Ala Gly Asn Pro Lys Cys Lys Ile Ala Ile Val
 420 425 430
 Leu Gly Arg Thr Gln Asn Thr Ser Leu Ser Arg
 435 440

<210> 4764

<211> 370

<212> PRT

<213> Homo sapiens

<400> 4764

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Met Met Thr Pro Gln Val Ile Thr Pro Gln Gln Met Gln Gln Ile Leu
  1              5              10              15
Gln Gln Gln Val Leu Ser Pro Gln Gln Leu Gln Ala Leu Leu Gln Gln
      20              25              30
Gln Gln Ala Val Met Leu Gln Gln Asp Phe Leu Asp Ser Gly Leu Glu
      35              40              45
Asn Phe Arg Ala Ala Leu Glu Lys Asn Gln Gln Leu Gln Glu Phe Tyr
      50              55              60
Lys Lys Gln Gln Glu Gln Leu His Leu Gln Leu Leu Gln Gln Gln Gln
      65              70              75              80
Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
      85              90              95
Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
      100             105             110
Gln Gln Gln Gln His Pro Gly Lys Gln Ala Lys Glu Gln Gln Gln Gln
      115             120             125
Gln Gln Gln Gln Gln Gln Leu Ala Ala Gln Gln Leu Val Phe Gln Gln
      130             135             140
Gln Leu Leu Gln Met Gln Gln Leu Gln Gln Gln Gln His Leu Leu Ser
      145             150             155             160
Leu Gln Arg Gln Gly Leu Ile Ser Ile Pro Pro Gly Gln Ala Ala Leu
      165             170             175
Pro Val Gln Ser Leu Pro Gln Ala Gly Leu Ser Pro Ala Glu Ile Gln
      180             185             190
Gln Leu Trp Lys Glu Val Thr Gly Val His Ser Met Glu Asp Asn Gly
      195             200             205
Ile Lys His Gly Gly Leu Asp Leu Thr Thr Asn Asn Ser Ser Ser Thr
      210             215             220
Thr Ser Ser Asn Thr Ser Lys Ala Ser Pro Pro Ile Thr His His Ser
      225             230             235             240
Ile Val Asn Gly Gln Ser Ser Val Leu Ser Ala Arg Arg Asp Ser Ser
      245             250             255

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Ser His Glu Glu Thr Gly Ala Ser His Thr Leu Tyr Gly His Gly Val
 260 265 270
 Cys Lys Trp Pro Gly Cys Glu Ser Ile Cys Glu Asp Phe Gly Gln Phe
 275 280 285
 Leu Lys His Leu Asn Asn Glu His Ala Leu Asp Asp Arg Ser Thr Ala
 290 295 300
 Gln Cys Arg Val Gln Met Gln Val Val Gln Gln Leu Glu Ile Gln Leu
 305 310 315 320
 Ser Lys Glu Arg Glu Arg Leu Gln Ala Met Met Thr His Leu His Met
 325 330 335
 Arg Pro Ser Glu Pro Lys Pro Ser Pro Lys Pro Lys Leu Pro Gln Thr
 340 345 350
 Met Asn Phe Ile Lys Met Gln Met Ser Asp Leu His Leu Leu Met Gln
 355 360 365
 Leu Ser
 370

<210> 4765

<211> 379

<212> PRT

<213> Homo sapiens

<400> 4765

Met Ser Arg Gly Tyr Ser Glu Asn Asn Asn Phe Leu Asn Asn Asn Asn
 1 5 10 15
 Gln Met Val Leu Asp Met Ile Leu Tyr Pro Leu Ile Gly Ile Pro Gln
 20 25 30
 Thr Ile Asn Trp Glu Thr Ile Ala Arg Leu Val Pro Gly Leu Thr Pro
 35 40 45
 Lys Glu Cys Ala Lys Arg Phe Asp Glu Leu Lys Ser Ser Gly Ser Ser
 50 55 60
 Pro Val Asp Asn Gln Tyr Asn Ser Leu Met Ala Ala Gly Glu Ser Pro
 65 70 75 80
 Val Glu Thr Leu Ala Thr Tyr Ile Lys Ser Ser Leu Leu Asp Ile His
 85 90 95

Gly Glu Phe Gln Glu Thr Pro Val Gly His Asp Ala Val Ser Lys Thr
 100 105 110
 Gly Arg His Ser Ile Ala Ser Thr Arg Asn Cys Ser Ser Glu Ser Glu
 115 120 125
 Asn Cys Thr Thr His Asn Gly Gly Glu Met Thr Glu Glu Ser Glu Gly
 130 135 140
 Pro Asn Met Val Ile His Val Cys Asp Glu Ala Lys Asn Leu Lys Glu
 145 150 155 160
 Asp Phe Thr Cys Pro Arg Asp Leu Leu Ile Ser Glu Met Lys Tyr Phe
 165 170 175
 Ala Glu Tyr Leu Ser Met Asp Ala Gln Arg Trp Glu Glu Val Asp Ile
 180 185 190
 Ser Val His Cys Asp Val His Ile Phe Asn Trp Leu Ile Lys Tyr Ile
 195 200 205
 Lys Arg Asn Thr Lys Glu Asn Lys Asp Cys Glu Met Pro Thr Leu Glu
 210 215 220
 Pro Gly Asn Val Ile Ser Ile Leu Ile Ser Ser Glu Phe Leu Lys Met
 225 230 235 240
 Asp Ser Leu Val Glu Gln Cys Ile Gln Tyr Cys His Lys Asn Met Asn
 245 250 255
 Ala Ile Val Ala Thr Pro Cys Asn Met Asn Cys Ile Asn Ala Asn Leu
 260 265 270
 Leu Thr Arg Ile Ala Asp Leu Phe Ser His Asn Glu Val Asp Asp Leu
 275 280 285
 Lys Asp Lys Lys Asp Lys Phe Lys Ser Lys Leu Phe Cys Lys Lys Ile
 290 295 300
 Glu Arg Leu Phe Asp Pro Glu Tyr Leu Asn Pro Asp Ser Arg Ser Asn
 305 310 315 320
 Ala Ala Thr Leu Tyr Arg Cys Cys Leu Cys Lys Lys Leu Leu Thr Lys
 325 330 335
 Glu Thr Glu Arg Arg Ile Pro Cys Ile Pro Gly Lys Ile Asn Val Asp
 340 345 350

 Arg Arg Gly Asn Ile Val Tyr Ile His Ile Arg Cys Arg Glu Asp Lys
 355 360 365
 Ile His Thr Cys Ile Phe Val Tyr Ile Tyr Ile

370

375

<210> 4766

<211> 155

<212> PRT

<213> Homo sapiens

<400> 4766

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Met His Lys Tyr Ile Leu Ile Val Lys Asp Leu Asn Pro Thr Glu Pro
  1             5             10             15
Pro Gln Cys Val Gly Ile Phe Pro Pro Leu Ser Pro Ile His Ala Ser
      20             25             30
Leu Leu Tyr Pro Leu Pro Pro Cys Ser Gly Pro Pro Cys Pro Leu Ser
      35             40             45
Ser Cys Trp Val Cys Cys Trp Glu Ser Ala Gly Asp Arg Lys Asp Arg
      50             55             60
Gly Glu Arg Gly Gln Gly Thr Asn Phe Pro Ser Pro Pro Leu Gln Ser
      65             70             75             80
His Gly Pro Ala Ala Phe Leu Tyr Gln Arg Phe Gln Leu Leu Pro Gly
      85             90             95
Gly Val Pro Lys Ser Ser Phe Ser Leu Gly His His Ala Ser Leu Pro
      100            105            110
Pro Ser Gln Pro Lys Ala Ser His Gly Ala His Arg Phe Leu Ser Arg
      115            120            125
Val Leu Ser Ile Met Phe Leu Cys Ile Leu Ser Met Leu Tyr Asn Trp
      130            135            140
Ser Phe Ile Lys Phe Cys Leu Asn Gly Pro Ile
      145            150            155

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<210> 4767

<211> 421

<212> PRT

<213> Homo sapiens

<400> 4767

Met Met Tyr Arg Thr Val Gly Phe Gly Thr Arg Ser Arg Asn Leu Lys
 1 5 10 15
 Pro Trp Met Ile Ala Val Leu Ile Val Leu Ser Leu Thr Val Val Ala
 20 25 30
 Val Thr Ile Gly Leu Leu Val His Phe Leu Val Phe Asp Gln Lys Lys
 35 40 45
 Glu Tyr Tyr His Gly Ser Phe Lys Ile Leu Asp Pro Gln Ile Asn Asn
 50 55 60
 Asn Phe Gly Gln Ser Asn Thr Tyr Gln Leu Lys Asp Leu Arg Glu Thr
 65 70 75 80
 Thr Glu Asn Leu Val Ser Gln Val Asp Glu Ile Phe Ile Asp Ser Ala
 85 90 95
 Trp Lys Lys Asn Tyr Ile Lys Asn Gln Val Val Arg Leu Thr Pro Glu
 100 105 110
 Glu Asp Gly Val Lys Val Asp Val Ile Met Val Phe Gln Phe Pro Ser
 115 120 125
 Thr Glu Gln Arg Ala Val Arg Glu Lys Lys Ile Gln Ser Ile Leu Asn
 130 135 140
 Gln Lys Ile Arg Asn Leu Arg Ala Leu Pro Ile Asn Ala Ser Ser Val
 145 150 155 160
 Gln Val Asn Ala Met Ser Ser Ser Thr Gly Glu Leu Thr Val Gln Ala
 165 170 175
 Ser Cys Gly Lys Arg Val Val Pro Leu Asn Val Asn Arg Ile Ala Ser
 180 185 190
 Gly Val Ile Ala Pro Lys Ala Ala Trp Pro Trp Gln Ala Ser Leu Gln
 195 200 205
 Tyr Asp Asn Ile His Gln Cys Gly Ala Thr Leu Ile Ser Asn Thr Trp
 210 215 220
 Leu Val Thr Ala Ala His Cys Phe Gln Lys Tyr Lys Asn Pro His Gln
 225 230 235 240
 Trp Thr Val Ser Phe Gly Thr Lys Ile Asn Pro Pro Leu Met Lys Arg
 245 250 255
 Asn Val Arg Arg Phe Ile Ile His Glu Lys Tyr Arg Ser Ala Ala Arg
 260 265 270
 Glu Tyr Asp Ile Ala Val Val Gln Val Ser Ser Arg Val Thr Phe Ser

275 280 285
 Asp Asp Ile Arg Arg Ile Cys Leu Pro Glu Ala Ser Ala Ser Phe Gln
 290 295 300
 Pro Asn Leu Thr Val His Ile Thr Gly Phe Gly Ala Leu Tyr Tyr Gly
 305 310 315 320
 Gly Glu Ser Gln Asn Asp Leu Arg Glu Ala Arg Val Lys Ile Ile Ser
 325 330 335
 Asp Asp Val Cys Lys Gln Pro Gln Val Tyr Gly Asn Asp Ile Lys Pro
 340 345 350
 Gly Met Phe Cys Ala Gly Tyr Met Glu Gly Ile Tyr Asp Ala Cys Arg
 355 360 365
 Gly Asp Ser Gly Gly Pro Leu Val Thr Arg Asp Leu Lys Asp Thr Trp
 370 375 380
 Tyr Leu Ile Gly Ile Val Ser Trp Gly Asp Asn Cys Gly Gln Lys Asp
 385 390 395 400
 Lys Pro Gly Val Tyr Thr Gln Val Thr Tyr Tyr Arg Asn Trp Ile Ala
 405 410 415
 Ser Lys Thr Gly Ile
 420

<210> 4768

<211> 495

<212> PRT

<213> Homo sapiens

<400> 4768

Met Ala Ala Glu Pro Gln Pro Ser Ser Leu Ser Tyr Arg Thr Thr Gly
 1 5 10 15
 Ser Thr Tyr Leu His Pro Leu Ser Glu Leu Leu Gly Ile Pro Leu Asp
 20 25 30
 Gln Val Asn Phe Val Val Cys Gln Leu Val Ala Leu Phe Ala Ala Phe
 35 40 45
 Trp Phe Arg Ile Tyr Leu Arg Pro Gly Thr Thr Ser Ser Asp Val Arg
 50 55 60
 His Ala Val Ala Thr Ile Phe Gly Ile Tyr Phe Val Ile Phe Cys Phe

65	70	75	80
Gly Trp Tyr Ser Val His Leu Phe Val Leu Val Leu Met Cys Tyr Ala			
85	90	95	
Ile Met Val Thr Ala Ser Val Ser Asn Ile His Arg Tyr Ser Phe Phe			
100	105	110	
Val Ala Met Gly Tyr Leu Thr Ile Cys His Ile Ser Arg Ile Tyr Ile			
115	120	125	
Phe His Tyr Gly Ile Leu Thr Thr Asp Phe Ser Gly Pro Leu Met Ile			
130	135	140	
Val Thr Gln Lys Ile Thr Thr Leu Ala Phe Gln Val His Asp Gly Leu			
145	150	155	160
Gly Arg Arg Ala Glu Asp Leu Ser Ala Glu Gln His Arg Leu Ala Ile			
165	170	175	
Lys Val Lys Pro Ser Phe Leu Glu Tyr Leu Ser Tyr Leu Leu Asn Phe			
180	185	190	
Met Ser Val Ile Ala Gly Pro Cys Asn Asn Phe Lys Asp Tyr Ile Ala			
195	200	205	
Phe Ile Glu Gly Lys His Ile His Met Lys Leu Leu Glu Val Asn Trp			
210	215	220	
Lys Arg Lys Gly Phe His Ser Leu Pro Glu Pro Ser Pro Thr Gly Ala			
225	230	235	240
Val Ile His Lys Leu Gly Ile Thr Leu Val Ser Leu Leu Leu Phe Leu			
245	250	255	
Thr Leu Thr Lys Thr Phe Pro Val Thr Cys Leu Val Asp Asp Trp Phe			
260	265	270	
Val His Lys Ala Ser Phe Pro Ala Arg Leu Cys Tyr Leu Tyr Val Val			
275	280	285	
Met Gln Ala Ser Lys Pro Lys Tyr Tyr Phe Ala Trp Thr Leu Ala Asp			
290	295	300	
Ala Val Asn Asn Ala Ala Gly Phe Gly Phe Ser Gly Val Asp Lys Asn			
305	310	315	320
Gly Asn Phe Cys Trp Asp Leu Leu Ser Asn Leu Asn Ile Trp Lys Ile			
325	330	335	
Glu Thr Ala Thr Ser Phe Lys Met Tyr Leu Glu Asn Trp Asn Ile Gln			
340	345	350	
Thr Ala Thr Trp Leu Lys Cys Val Cys Tyr Gln Arg Val Pro Trp Tyr			

355 360 365
 Pro Thr Val Leu Thr Phe Ile Leu Ser Ala Leu Trp His Gly Val Tyr
 370 375 380
 Pro Gly Tyr Tyr Phe Thr Phe Leu Thr Gly Ile Leu Val Thr Leu Ala
 385 390 395 400
 Ala Arg Ala Val Arg Asn Asn Tyr Arg His Tyr Phe Leu Ser Ser Arg
 405 410 415
 Ala Leu Lys Ala Val Tyr Asp Ala Gly Thr Trp Ala Val Thr Gln Leu
 420 425 430
 Ala Val Ser Tyr Thr Val Ala Pro Phe Val Met Leu Ala Val Glu Pro
 435 440 445
 Thr Ile Ser Leu Tyr Lys Ser Met Tyr Phe Tyr Leu His Ile Ile Ser
 450 455 460
 Leu Leu Ile Ile Leu Phe Leu Pro Met Lys Pro Gln Ala His Thr Gln
 465 470 475 480
 Arg Arg Pro Gln Thr Leu Asn Ser Ile Asn Lys Arg Lys Thr Asp
 485 490 495

<210> 4769

<211> 953

<212> PRT

<213> Homo sapiens

<400> 4769

Met Cys Asn Pro Glu Glu Ala Ala Leu Leu Arg Leu Glu Glu Val Phe
 1 5 10 15
 Ser Ala Thr Leu Ala His Val Asn Ser Leu Val Leu Gln Pro Leu Leu
 20 25 30

 Pro Ala Ala Pro Asp Pro Ser Asp Pro Trp Gly Arg Glu Cys Leu Arg
 35 40 45
 Leu Leu Gln Gln Leu His Lys Ser Ser Gln Gln Leu Trp Glu Val Thr
 50 55 60
 Glu Glu Ser Leu His Ser Leu Gln Glu Arg Leu Arg Tyr Pro Asp Ser
 65 70 75 80

Thr Gly Leu Glu Ser Leu Leu Leu Leu Arg Gly Ala Asp Arg Val Leu
 85 90 95
 Gln Ala His Ile Glu Tyr Ile Glu Ser Tyr Thr Ser Cys Met Val Val
 100 105 110
 Gln Ala Phe Gln Lys Ala Ala Lys Arg Arg Ser Glu Tyr Trp Arg Gly
 115 120 125
 Gln Arg Lys Ala Leu Arg Gln Leu Leu Ser Gly Val Ser Ser Glu Gly
 130 135 140
 Ser Val Gly Ala Ser Leu Gly Gln Ala Leu His Gln Pro Leu Ala His
 145 150 155 160
 His Val Gln Gln Tyr Val Leu Leu Leu Leu Ser Pro Gly Asp Thr Ile
 165 170 175
 Gly Glu His His Pro Thr Arg Glu Leu Val Val Asn Ala Val Thr Leu
 180 185 190
 Phe Gly Asn Leu Gln Ser Phe Met Lys Gln Glu Leu Asp Gln Ala Val
 195 200 205
 Ala Thr Gln Ala Leu Trp His Thr Leu Arg Gly Arg Leu Arg Asp Val
 210 215 220
 Leu Cys Thr Pro Ala His Arg Leu Leu Gln Asp Ser Gln Asp Val Pro
 225 230 235 240
 Val Thr Val Ala Pro Leu Arg Ala Glu Arg Val Leu Leu Phe Asp Asp
 245 250 255
 Ala Leu Val Leu Leu Gln Gly His Asn Val His Thr Phe Asp Leu Lys
 260 265 270
 Leu Val Trp Val Asp Pro Gly Gln Asp Gly Cys Thr Phe His Leu Leu
 275 280 285
 Thr Pro Glu Glu Glu Phe Ser Phe Cys Ala Lys Asp Ser Gln Gly Gln
 290 295 300
 Ala Val Trp Gln Trp Lys Val Thr Trp Ala Val His Gln Ala Leu His
 305 310 315 320
 Gly Lys Lys Asp Phe Pro Val Leu Gly Ala Gly Leu Glu Pro Ser Gln
 325 330 335
 Pro Pro Asp Cys Arg Cys Ala Glu Tyr Thr Phe Gln Ala Glu Gly Arg
 340 345 350
 Leu Cys Gln Ala Thr Tyr Glu Gly Glu Trp Cys Arg Gly Arg Pro His
 355 360 365

Gly Lys Gly Thr Leu Lys Trp Pro Asp Gly Arg Asn His Val Gly Asn			
370	375	380	
Phe Cys Gln Gly Leu Glu His Gly Phe Gly Ile Arg Leu Leu Pro Gln			
385	390	395	400
Ala Ser Glu Asp Lys Phe Asp Cys Tyr Lys Cys His Trp Arg Glu Gly			
	405	410	415
Ser Met Cys Gly Tyr Gly Ile Cys Glu Tyr Ser Thr Asp Gly Val Tyr			
	420	425	430
Lys Gly Tyr Phe Gln Glu Gly Leu Arg His Gly Phe Gly Val Leu Glu			
	435	440	445
Ser Gly Pro Gln Ala Pro Gln Pro Phe Arg Tyr Thr Gly His Trp Glu			
	450	455	460
Arg Gly Gln Arg Ser Gly Tyr Gly Ile Glu Glu Asp Gly Asp Arg Gly			
465	470	475	480
Glu Arg Tyr Ile Gly Met Trp Gln Ala Gly Gln Arg His Gly Pro Gly			
	485	490	495
Val Met Val Thr Gln Ala Gly Val Cys Tyr Gln Gly Thr Phe Gln Ala			
	500	505	510
Asp Lys Thr Val Gly Pro Gly Ile Leu Leu Ser Glu Asp Asp Ser Leu			
	515	520	525
Tyr Glu Gly Thr Phe Thr Arg Asp Leu Thr Leu Met Gly Lys Gly Lys			
	530	535	540
Val Thr Phe Pro Asn Gly Phe Thr Leu Glu Gly Ser Phe Gly Ser Gly			
545	550	555	560
Ala Gly Arg Gly Leu His Thr Gln Gly Val Leu Asp Thr Ala Ala Leu			
	565	570	575
Pro Pro Asp Pro Ser Ser Thr Cys Lys Arg Gln Leu Gly Val Gly Ala			
	580	585	590
Phe Pro Val Glu Ser Arg Trp Gln Gly Val Tyr Ser Pro Phe Arg Asp			
	595	600	605
Phe Val Cys Ala Gly Cys Pro Arg Asp Leu Gln Glu Ala Leu Leu Gly			
	610	615	620
Phe Asp Val Gln Ser Ser Arg Glu Leu Arg Arg Ser Gln Asp Tyr Leu			
625	630	635	640
Ser Cys Glu Arg Thr His Pro Glu Asp Ser Val Gly Ser Met Glu Asp			
	645	650	655

Ile Leu Glu Glu Leu Leu Gln His Arg Glu Pro Lys Ala Leu Gln Leu			
660	665	670	
Tyr Leu Arg Lys Ala Leu Ser Asn Ser Leu His Pro Leu Gly Lys Leu			
675	680	685	
Leu Arg Thr Leu Met Leu Thr Phe Gln Ala Thr Tyr Ala Gly Val Gly			
690	695	700	
Ala Asn Lys His Leu Gln Glu Leu Ala Gln Glu Glu Val Lys Gln His			
705	710	715	720
Ala Gln Glu Leu Trp Ala Ala Tyr Arg Gly Leu Leu Arg Val Ala Leu			
725	730	735	
Glu Arg Lys Gly Gln Ala Leu Glu Glu Asp Glu Asp Thr Glu Thr Arg			
740	745	750	
Asp Leu Gln Val His Gly Leu Val Leu Pro Leu Met Leu Pro Ser Phe			
755	760	765	
Tyr Ser Glu Leu Phe Thr Leu Tyr Leu Leu Leu His Glu Arg Glu Asp			
770	775	780	
Ser Phe Tyr Ser Gln Gly Ile Ala Asn Leu Ser Leu Phe Pro Asp Thr			
785	790	795	800
Gln Leu Leu Glu Phe Leu Asp Val Gln Lys His Leu Trp Pro Leu Lys			
805	810	815	
Asp Leu Thr Leu Thr Ser Asn Gln Arg Tyr Ser Leu Val Arg Asp Lys			
820	825	830	
Cys Phe Leu Ser Ala Thr Glu Cys Leu Gln Lys Ile Met Thr Thr Val			
835	840	845	
Asp Pro Arg Glu Lys Leu Glu Val Leu Glu Arg Thr Tyr Gly Glu Ile			
850	855	860	
Glu Gly Thr Val Ser Arg Val Leu Gly Arg Glu Tyr Lys Leu Pro Met			
865	870	875	880
Asp Asp Leu Leu Pro Leu Leu Ile Tyr Val Val Ser His Ala Arg Ile			
885	890	895	
Gln His Leu Gly Ala Glu Ile His Leu Ile Arg Asp Met Met Asp Pro			
900	905	910	
Asn His Thr Gly Gly Leu Tyr Asp Phe Leu Leu Thr Ala Leu Glu Ser			
915	920	925	
Cys Tyr Glu His Ile Gln Lys Glu Asp Met Arg Leu His Arg Leu Pro			
930	935	940	

Gly His Trp His Ser Arg Glu Leu Trp

945

950

<210> 4770

<211> 331

<212> PRT

<213> Homo sapiens

<400> 4770

Met Asn Val Lys Asn Val Gly Lys Leu Asn Gln Ser Ser Asp Leu Leu

1

5

10

15

Arg His His Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asn Lys

20

25

30

Cys Gly Glu Ser Phe Arg Ser Ser Ser Asp Leu Ile Lys His His Arg

35

40

45

Val His Thr Gly Glu Lys Pro His Glu Cys Ser Glu Cys Gly Lys Val

50

55

60

Phe Ser Gln Arg Ser His Leu Val Thr His Gln Lys Ile His Thr Gly

65

70

75

80

Glu Lys Pro Tyr Gln Cys Thr Glu Cys Glu Lys Ala Phe Arg Arg Arg

85

90

95

Ser Leu Leu Ile Gln Arg Arg Arg Ile His Ser Gly Glu Lys Pro Cys

100

105

110

Glu Cys Lys Glu Cys Gly Lys Leu Phe Met Trp His Thr Ala Phe Leu

115

120

125

Lys His Gln Arg Leu His Ala Gly Glu Lys Leu Glu Glu Cys Glu Lys

130

135

140

Thr Phe Ser Lys Asp Glu Glu Leu Arg Gly Glu Gln Lys Ile His Gln

145

150

155

160

Glu Glu Lys Ala Tyr Trp Cys Asn Gln Cys Gly Arg Ala Phe Gln Gly

165

170

175

Ser Ser Asp Leu Ile Gly His Gln Val Thr His Thr Gly Glu Lys Pro

180

185

190

Tyr Glu Cys Lys Glu Cys Gly Lys Thr Phe Asn Gln Ser Ser Asp Leu

195

200

205

Leu Arg His His Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asn
 210 215 220
 Lys Cys Gly Lys Ser Phe Arg Gly Ser Ser Asp Leu Ile Arg His His
 225 230 235 240
 Arg Val His Thr Gly Glu Lys Pro Tyr Glu Cys Pro Glu Cys Trp Lys
 245 250 255
 Ala Phe Ser Gln Asn Ser His Leu Val Ser His Gln Arg Ile His Thr
 260 265 270
 Arg Glu Lys Pro Phe Glu Cys Ser Asn Cys Gly Lys Ala Phe Ser Gly
 275 280 285
 Trp Thr Ala Phe Leu Lys His Gln Lys Leu His Ile Gly Lys Glu Phe
 290 295 300
 Glu Asp Cys Lys Ser Leu Gln Thr Gly Pro Ile Leu Ile Gly Ser Arg
 305 310 315 320
 Asn Leu Met Asn Ala Val Lys Leu Gly Lys Val
 325 330

<210> 4771

<211> 1099

<212> PRT

<213> Homo sapiens

<400> 4771

Met Ala His Leu Gly Pro Thr Pro Pro Pro His Ser Leu Asn Tyr Lys
 1 5 10 15
 Ser Glu Asp Arg Leu Ser Glu Gln Asp Trp Pro Ala Tyr Phe Lys Val
 20 25 30
 Pro Cys Cys Gly Val Asp Thr Ser Gln Ile Glu Ser Glu Glu Ala Glu
 35 40 45
 Val Asp Val Arg Glu Arg Glu Thr Gln Arg Asp Arg Glu Pro Lys Arg
 50 55 60
 Ala Arg Asp Leu Thr Leu Arg Asp Ser Cys Thr Asp Asn Ser Met Gln
 65 70 75 80
 Phe Gly Thr Arg Thr Thr Thr Ala Glu Pro Gly Phe Met Gly Thr Trp
 85 90 95

Gln Asn Ala Asp Thr Asn Leu Leu Phe Arg Met Ser Gln Gln Ala Ile
 100 105 110
 Arg Cys Thr Leu Val Asn Cys Thr Cys Glu Cys Phe Gln Pro Gly Lys
 115 120 125
 Ile Asn Leu Arg Thr Cys Asp Gln Cys Lys His Gly Trp Val Ala His
 130 135 140
 Ala Leu Asp Lys Leu Ser Thr Gln His Leu Tyr His Pro Thr Gln Val
 145 150 155 160
 Glu Ile Val Gln Ser Asn Val Val Phe Asp Ile Ser Ser Leu Met Leu
 165 170 175
 Tyr Gly Thr Gln Ala Val Pro Val Arg Leu Lys Ile Leu Leu Asp Arg
 180 185 190
 Leu Phe Ser Val Leu Lys Gln Glu Glu Val Leu His Ile Leu His Gly
 195 200 205
 Leu Gly Trp Thr Leu Arg Asp Tyr Val Arg Gly Tyr Ile Leu Gln Asp
 210 215 220
 Ala Ala Gly Lys Val Leu Asp Arg Trp Ala Ile Met Ser Arg Glu Glu
 225 230 235 240
 Glu Ile Ile Thr Leu Gln Gln Phe Leu Arg Phe Gly Glu Thr Lys Ser
 245 250 255
 Ile Val Glu Leu Met Ala Ile Gln Glu Lys Glu Gly Gln Ala Val Ala
 260 265 270
 Val Pro Ser Ser Lys Thr Asp Ser Asp Ile Arg Thr Phe Ile Glu Ser
 275 280 285
 Asn Asn Arg Thr Arg Ser Pro Ser Leu Leu Ala His Leu Glu Asn Ser
 290 295 300
 Asn Pro Ser Ser Ile His His Phe Glu Asn Ile Pro Asn Ser Leu Ala
 305 310 315 320
 Phe Leu Leu Pro Phe Gln Tyr Ile Asn Pro Val Ser Ala Pro Leu Leu
 325 330 335
 Gly Leu Pro Pro Asn Gly Leu Leu Leu Glu Gln Pro Gly Leu Arg Leu
 340 345 350
 Arg Glu Pro Ser Leu Ser Thr Gln Asn Glu Tyr Asn Glu Ser Ser Glu
 355 360 365
 Ser Glu Val Ser Pro Thr Pro Tyr Lys Asn Asp Gln Thr Pro Asn Arg
 370 375 380

Asn Ala Leu Thr Ser Ile Thr Asn Val Glu Pro Lys Thr Glu Pro Ala
 385 390 395 400
 Cys Val Ser Pro Ile Gln Asn Ser Ala Pro Val Ser Asp Leu Thr Lys
 405 410 415
 Thr Glu His Pro Lys Ser Ser Phe Arg Ile His Arg Met Arg Arg Met
 420 425 430
 Gly Ser Ala Ser Arg Lys Gly Arg Val Phe Cys Asn Ala Cys Gly Lys
 435 440 445
 Thr Phe Tyr Asp Lys Gly Thr Leu Lys Ile His Tyr Asn Ala Val His
 450 455 460
 Leu Lys Ile Lys His Arg Cys Thr Ile Glu Gly Cys Asn Met Val Phe
 465 470 475 480
 Ser Ser Leu Arg Ser Arg Asn Arg His Ser Ala Asn Pro Asn Pro Arg
 485 490 495
 Leu His Met Pro Met Leu Arg Asn Asn Arg Asp Lys Asp Leu Ile Arg
 500 505 510
 Ala Thr Ser Gly Ala Ala Thr Pro Val Ile Ala Ser Thr Lys Ser Asn
 515 520 525
 Leu Ala Leu Thr Ser Pro Gly Arg Pro Pro Met Gly Phe Thr Thr Pro
 530 535 540
 Pro Leu Asp Pro Val Leu Gln Asn Pro Leu Pro Ser Gln Leu Val Phe
 545 550 555 560
 Ser Gly Leu Lys Thr Val Gln Pro Val Pro Pro Phe Tyr Arg Ser Leu
 565 570 575
 Leu Thr Pro Gly Glu Met Val Ser Pro Pro Thr Ser Leu Pro Thr Ser
 580 585 590
 Pro Ile Ile Pro Thr Ser Gly Thr Ile Glu Gln His Pro Pro Pro Pro
 595 600 605
 Ser Glu Pro Val Val Pro Ala Val Met Met Ala Thr His Glu Pro Ser
 610 615 620
 Ala Asp Leu Ala Pro Lys Lys Lys Pro Arg Lys Ser Ser Met Pro Val
 625 630 635 640
 Lys Ile Glu Lys Glu Ile Ile Asp Thr Ala Asp Glu Phe Asp Asp Glu
 645 650 655
 Asp Asp Asp Pro Asn Asp Gly Gly Ala Val Val Asn Asp Met Ser His
 660 665 670

Asp Asn His Cys His Ser Gln Glu Glu Met Ser Pro Gly Met Ser Val
 675 680 685
 Lys Asp Phe Ser Lys His Asn Arg Thr Arg Cys Ile Ser Arg Thr Glu
 690 695 700
 Ile Arg Arg Ala Asp Ser Met Thr Ser Glu Asp Gln Glu Pro Glu Arg
 705 710 715 720
 Asp Tyr Glu Asn Glu Ser Glu Ser Ser Glu Pro Lys Leu Gly Glu Glu
 725 730 735
 Ser Met Glu Gly Asp Glu His Ile His Ser Glu Val Ser Glu Lys Val
 740 745 750
 Leu Met Asn Ser Glu Arg Pro Asp Glu Asn His Ser Glu Pro Ser His
 755 760 765
 Gln Asp Val Ile Lys Val Lys Glu Glu Phe Thr Asp Pro Thr Tyr Asp
 770 775 780
 Met Phe Tyr Met Ser Gln Tyr Gly Leu Tyr Asn Gly Gly Gly Ala Ser
 785 790 795 800
 Met Ala Ala Leu His Glu Ser Phe Thr Ser Ser Leu Asn Tyr Gly Ser
 805 810 815
 Pro Gln Lys Phe Ser Pro Glu Gly Asp Leu Cys Ser Ser Pro Asp Pro
 820 825 830
 Lys Ile Cys Tyr Val Cys Lys Lys Ser Phe Lys Ser Ser Tyr Ser Val
 835 840 845
 Lys Leu His Tyr Arg Asn Val His Leu Lys Glu Met His Val Cys Thr
 850 855 860
 Val Ala Gly Cys Asn Ala Ala Phe Pro Ser Arg Arg Ser Arg Asp Arg
 865 870 875 880
 His Ser Ala Asn Ile Asn Leu His Arg Lys Leu Leu Thr Lys Glu Leu
 885 890 895
 Asp Asp Met Gly Leu Asp Ser Ser Gln Pro Ser Leu Ser Lys Asp Leu
 900 905 910
 Arg Asp Glu Phe Leu Val Lys Ile Tyr Gly Ala Gln His Pro Met Gly
 915 920 925
 Leu Asp Val Arg Glu Asp Ala Ser Ser Pro Ala Gly Thr Glu Asp Ser
 930 935 940
 His Leu Asn Gly Tyr Gly Arg Gly Met Ala Glu Asp Tyr Met Val Leu

945 950 955 960
 Asp Leu Ser Thr Thr Ser Ser Leu Gln Ser Ser Ser Ser Ile His Ser
 965 970 975
 Ser Arg Glu Ser Asp Ala Gly Ser Asp Glu Gly Ile Leu Leu Asp Asp
 980 985 990
 Ile Asp Gly Ala Ser Asp Ser Gly Glu Ser Ala His Lys Ala Glu Ala
 995 1000 1005
 Pro Ala Leu Pro Gly Ser Leu Gly Ala Glu Val Ser Gly Ser Leu Met
 1010 1015 1020
 Phe Ser Ser Leu Ser Gly Ser Asn Gly Gly Ile Met Cys Asn Ile Cys
 1025 1030 1035 1040
 His Lys Met Tyr Ser Asn Lys Gly Thr Leu Arg Val His Tyr Lys Thr
 1045 1050 1055
 Val His Leu Arg Glu Met His Lys Cys Lys Val Pro Gly Cys Asn Met
 1060 1065 1070
 Met Phe Ser Ser Val Arg Ser Arg Asn Arg His Ser Gln Asn Pro Asn
 1075 1080 1085
 Leu His Lys Asn Ile Pro Phe Thr Ser Val Asp
 1090 1095

<210> 4772

<211> 247

<212> PRT

<213> Homo sapiens

<400> 4772

Met Gly Gly Ala Gly Arg Gly Val Gly Glu Gly Arg Gly Arg Gly Gly
 1 5 10 15
 Gly Gly Arg Arg Trp Arg Ala Val Met Ala Ala Gly Asp Gly Asp Val
 20 25 30
 Lys Leu Gly Thr Leu Gly Ser Gly Ser Glu Ser Ser Asn Asp Gly Gly
 35 40 45
 Ser Glu Ser Pro Gly Asp Ala Gly Ala Ala Ala Glu Gly Gly Gly Trp
 50 55 60
 Ala Ala Ala Ala Leu Ala Leu Leu Thr Gly Gly Gly Glu Met Leu Leu

65	70	75	80
Asn Val Ala Leu Val	Ala Leu Val Leu	Leu Gly Ala Tyr	Arg Leu Trp
85	90	95	
Val Arg Trp Gly Arg	Arg Gly Leu Gly	Ala Gly Ala Gly	Ala Gly Glu
100	105	110	
Glu Ser Pro Ala Thr	Ser Leu Pro Arg	Met Lys Lys Arg	Asp Phe Ser
115	120	125	
Leu Glu Gln Leu Arg	Gln Tyr Asp Gly	Ser Arg Asn Pro	Arg Ile Leu
130	135	140	
Leu Ala Val Asn Gly	Lys Val Phe Asp	Val Thr Lys Gly	Ser Lys Phe
145	150	155	160
Tyr Gly Pro Ala Gly	Pro Tyr Gly Ile	Phe Ala Gly Arg	Asp Ala Ser
165	170	175	
Arg Gly Leu Ala Thr	Phe Cys Leu Asp	Lys Asp Ala Leu	Arg Asp Glu
180	185	190	
Tyr Asp Asp Leu Ser	Asp Leu Asn Ala	Val Gln Met Glu	Ser Val Arg
195	200	205	
Glu Trp Glu Met Gln	Phe Lys Glu Lys	Tyr Asp Tyr Val	Gly Arg Leu
210	215	220	
Leu Lys Pro Gly Glu	Glu Pro Ser Glu	Tyr Thr Asp Glu	Glu Asp Thr
225	230	235	240
Lys Asp His Asn Lys	Gln Asp		
245			

<210> 4773

<211> 705

<212> PRT

<213> Homo sapiens

<400> 4773

Met Lys Gln Glu Leu	Asp Gln Ala Val	Ala Thr Gln Ala	Leu Trp His
1	5	10	15
Thr Leu Arg Gly Arg	Leu Arg Asp Val	Leu Cys Thr Pro	Ala His Arg
20	25	30	
Leu Leu Gln Asp Ser	Gln Asp Val Pro	Val Thr Val Ala	Pro Leu Arg

35	40	45
Ala Glu Arg Val Leu Leu Phe Asp Asp Ala Leu Val Leu Leu Gln Gly		
50	55	60
His Asn Val His Thr Phe Asp Leu Lys Leu Val Trp Val Asp Pro Gly		
65	70	75
Gln Asp Gly Cys Thr Phe His Leu Leu Thr Pro Glu Glu Glu Phe Ser		
85	90	95
Phe Cys Ala Lys Asp Ser Gln Gly Gln Ala Val Trp Gln Trp Lys Val		
100	105	110
Thr Trp Ala Val His Gln Ala Leu His Gly Lys Lys Asp Phe Pro Val		
115	120	125
Leu Gly Ala Gly Leu Glu Pro Ser Gln Pro Pro Asp Cys Arg Cys Ala		
130	135	140
Glu Tyr Thr Phe Gln Ala Glu Gly Arg Leu Cys Gln Ala Thr Tyr Glu		
145	150	155
Gly Glu Trp Cys Arg Gly Arg Pro His Gly Lys Gly Thr Leu Lys Trp		
165	170	175
Pro Asp Gly Arg Asn His Val Gly Asn Phe Cys Gln Gly Leu Glu His		
180	185	190
Gly Phe Gly Ile Arg Leu Leu Pro Gln Ala Ser Glu Asp Lys Phe Asp		
195	200	205
Cys Tyr Lys Cys His Trp Arg Glu Gly Ser Met Cys Gly Tyr Gly Ile		
210	215	220
Cys Glu Tyr Ser Thr Asp Glu Val Tyr Lys Gly Tyr Phe Gln Glu Gly		
225	230	235
Leu Arg His Gly Phe Gly Val Leu Glu Ser Gly Pro Gln Ala Pro Gln		
245	250	255
Pro Phe Arg Tyr Thr Gly His Trp Glu Arg Gly Gln Arg Ser Gly Tyr		
260	265	270
Gly Ile Glu Glu Asp Gly Asp Arg Gly Glu Arg Tyr Ile Gly Met Trp		
275	280	285
Gln Ala Gly Gln Arg His Gly Pro Gly Val Met Val Thr Gln Ala Gly		
290	295	300
Val Cys Tyr Gln Gly Thr Phe Gln Ala Asp Lys Thr Val Gly Pro Gly		
305	310	315
Ile Leu Leu Ser Glu Asp Asp Ser Leu Tyr Glu Gly Thr Phe Thr Arg		

325	330	335
Asp Leu Thr Leu Met Gly Lys Gly Lys Val Thr Phe Pro Asn Gly Phe		
340	345	350
Thr Leu Glu Gly Ser Phe Gly Ser Gly Ala Gly Arg Gly Leu His Thr		
355	360	365
Gln Gly Val Leu Asp Thr Ala Ala Leu Pro Pro Asp Pro Ser Ser Thr		
370	375	380
Cys Lys Arg Gln Leu Gly Val Gly Ala Phe Pro Val Glu Ser Arg Trp		
385	390	395
Gln Gly Val Tyr Ser Pro Phe Arg Asp Phe Val Cys Ala Gly Cys Pro		
405	410	415
Arg Asp Leu Gln Glu Ala Leu Leu Gly Phe Asp Val Gln Ser Ser Arg		
420	425	430
Glu Leu Arg Arg Ser Gln Asp Tyr Leu Ser Cys Glu Arg Thr His Pro		
435	440	445
Glu Asp Ser Val Gly Ser Met Glu Asp Ile Leu Glu Glu Leu Leu Gln		
450	455	460
His Arg Glu Pro Lys Ala Leu Gln Leu Tyr Leu Arg Lys Ala Leu Ser		
465	470	475
Asn Ser Leu His Pro Leu Gly Lys Leu Leu Arg Thr Leu Met Leu Thr		
485	490	495
Phe Gln Ala Thr Tyr Ala Gly Val Gly Ala Asn Lys His Leu Gln Gly		
500	505	510
Leu Ala Gln Glu Glu Val Lys Gln His Ala Gln Glu Leu Trp Ala Ala		
515	520	525
Tyr Arg Gly Leu Leu Arg Val Ala Leu Glu Arg Lys Gly Gln Ala Leu		
530	535	540
Glu Glu Asp Glu Asp Thr Glu Thr Arg Asp Leu Gln Val His Gly Leu		
545	550	555
Val Leu Pro Leu Met Leu Pro Ser Phe Tyr Ser Glu Leu Phe Thr Leu		
565	570	575
Tyr Leu Leu Leu His Glu Arg Glu Asp Ser Phe Tyr Ser Gln Gly Ile		
580	585	590
Ala Asn Leu Ser Leu Phe Pro Asp Thr Gln Leu Leu Glu Phe Leu Asp		
595	600	605
Val Gln Lys His Leu Trp Pro Leu Lys Asp Leu Thr Leu Thr Ser Asn		

610 615 620
 Gln Arg Tyr Ser Leu Val Arg Asp Lys Cys Phe Leu Ser Ala Thr Glu
 625 630 635 640
 Cys Leu Gln Lys Ile Met Thr Thr Val Asp Pro Arg Glu Lys Leu Glu
 645 650 655
 Val Leu Glu Arg Thr Tyr Gly Glu Ile Glu Gly Thr Val Ser Arg Val
 660 665 670
 Leu Gly Arg Glu Tyr Lys Arg Pro Trp Thr Thr Cys Cys His Phe Ser
 675 680 685
 Ser Thr Trp Cys Arg Ala Pro Glu Phe Ser Thr Trp Glu Pro Arg Ser
 690 695 700
 Thr
 705

<210> 4774

<211> 907

<212> PRT

<213> Homo sapiens

<400> 4774

Met Gln Tyr Gln Cys Lys Lys Cys Asn Val Val Phe Pro Arg Ile Phe
 1 5 10 15
 Asp Leu Ile Thr His Gln Lys Lys Gln Cys Tyr Lys Asp Glu Asp Asp
 20 25 30
 Asp Ala Gln Asp Glu Ser Gln Thr Glu Asp Ser Met Asp Ala Thr Asp
 35 40 45
 Gln Val Val Tyr Lys His Cys Thr Val Ser Gly Gln Thr Asp Ala Ala
 50 55 60
 Lys Asn Ala Ala Ala Pro Ala Ala Ser Ser Gly Ser Gly Thr Ser Thr
 65 70 75 80
 Pro Leu Ile Pro Ser Pro Lys Pro Glu Pro Glu Lys Thr Ser Pro Lys
 85 90 95
 Pro Glu Tyr Pro Ala Glu Lys Pro Lys Gln Ser Asp Pro Ser Pro Pro
 100 105 110
 Ser Gln Gly Thr Lys Pro Ala Leu Pro Leu Ala Ser Thr Ser Ser Asp

115	120	125
Pro Pro Gln Ala Ser Thr	Ala Gln Pro Gln Pro Gln Pro Pro	
130	135	140
Lys Gln Pro Gln Leu Ile Gly Arg Pro Pro Ser Ala Ser Gln Thr Pro		
145	150	155
Val Pro Ser Ser Pro Leu Gln Ile Ser Met Thr Ser Leu Gln Asn Ser		
165	170	175
Leu Pro Pro Gln Leu Leu Gln Tyr Gln Cys Asp Gln Cys Thr Val Ala		
180	185	190
Phe Pro Thr Leu Glu Leu Trp Gln Glu His Gln His Val His Phe Leu		
195	200	205
Ala Ala Gln Asn Gln Phe Leu His Ser Pro Phe Leu Glu Arg Pro Met		
210	215	220
Asp Met Pro Tyr Met Ile Phe Asp Pro Asn Asn Pro Leu Met Thr Gly		
225	230	235
Gln Leu Leu Gly Ser Ser Leu Thr Gln Met Pro Pro Gln Ala Ser Ser		
245	250	255
Ser His Thr Thr Ala Pro Thr Thr Val Ala Ala Ser Leu Lys Arg Lys		
260	265	270
Leu Asp Asp Lys Glu Asp Asn Asn Cys Ser Glu Lys Glu Gly Gly Asn		
275	280	285
Ser Gly Glu Asp Gln His Arg Asp Lys Arg Leu Arg Thr Thr Ile Thr		
290	295	300
Pro Glu Gln Leu Glu Ile Leu Tyr Glu Lys Tyr Leu Leu Asp Ser Asn		
305	310	315
Pro Thr Arg Lys Met Leu Asp His Ile Ala Arg Glu Val Gly Leu Lys		
325	330	335
Lys Arg Val Val Gln Val Trp Phe Gln Asn Thr Arg Ala Arg Glu Arg		
340	345	350
Lys Gly Gln Phe Arg Ala Val Gly Pro Ala Gln Ser His Lys Arg Cys		
355	360	365
Pro Phe Cys Arg Ala Leu Phe Lys Ala Lys Ser Ala Leu Glu Ser His		
370	375	380
Ile Arg Ser Arg His Trp Asn Glu Gly Lys Gln Ala Gly Tyr Ser Leu		
385	390	395
Pro Pro Ser Pro Leu Ile Ser Thr Glu Asp Gly Gly Glu Ser Pro Gln		

	405	410	415
Lys Tyr Ile Tyr Phe Asp Tyr Pro Ser Leu Pro Leu Thr Lys Ile Asp			
	420	425	430
Leu Ser Ser Glu Asn Glu Leu Ala Ser Thr Val Ser Thr Pro Val Ser			
	435	440	445
Lys Thr Ala Glu Leu Ser Pro Lys Asn Leu Leu Ser Pro Ser Ser Phe			
	450	455	460
Lys Ala Glu Cys Ser Glu Asp Val Glu Asn Leu Asn Ala Pro Pro Ala			
465	470	475	480
Glu Ala Gly Tyr Asp Gln Asn Lys Thr Asp Phe Asp Glu Thr Ser Ser			
	485	490	495
Ile Asn Thr Ala Ile Ser Asp Ala Thr Thr Gly Asp Glu Gly Asn Thr			
	500	505	510
Glu Met Glu Ser Thr Thr Gly Ser Ser Gly Asp Val Lys Pro Ala Leu			
	515	520	525
Ser Pro Lys Glu Pro Lys Thr Leu Asp Thr Leu Pro Lys Pro Ala Thr			
	530	535	540
Thr Pro Thr Thr Glu Val Cys Asp Asp Lys Phe Leu Phe Ser Leu Thr			
545	550	555	560
Ser Pro Ser Ile His Phe Asn Asp Lys Asp Gly Asp His Asp Gln Ser			
	565	570	575
Phe Tyr Ile Thr Asp Asp Pro Asp Asp Asn Ala Asp Arg Gly Glu Thr			
	580	585	590
Ser Ser Ile Ala Asp Pro Ser Ser Pro Asn Pro Phe Gly Ser Ser Asn			
	595	600	605
Pro Phe Lys Ser Lys Ser Asn Asp Arg Pro Gly His Lys Arg Phe Arg			
	610	615	620
Thr Gln Met Ser Asn Leu Gln Leu Lys Val Leu Lys Ala Cys Phe Ser			
625	630	635	640
Asp Tyr Arg Thr Pro Thr Met Gln Glu Cys Glu Met Leu Gly Asn Glu			
	645	650	655
Ile Gly Leu Pro Lys Arg Val Val Gln Val Trp Phe Gln Asn Ala Arg			
	660	665	670
Ala Lys Glu Lys Lys Phe Lys Ile Asn Ile Gly Lys Pro Phe Met Ile			
	675	680	685
Asn Gln Gly Gly Thr Glu Gly Thr Lys Pro Glu Cys Thr Leu Cys Gly			

690	695	700	
Val Lys Tyr Ser Ala Arg Leu Ser Ile Arg Asp His Ile Phe Ser Lys			
705	710	715	720
Gln His Ile Ser Lys Val Arg Glu Thr Val Gly Ser Gln Leu Asp Arg			
	725	730	735
Glu Lys Asp Tyr Leu Ala Pro Thr Thr Val Arg Gln Leu Met Ala Gln			
	740	745	750
Gln Glu Leu Asp Arg Ile Lys Lys Ala Ser Asp Val Leu Gly Leu Thr			
	755	760	765
Val Gln Gln Pro Gly Met Met Asp Ser Ser Ser Leu His Gly Ile Ser			
	770	775	780
Leu Pro Thr Ala Tyr Pro Gly Leu Pro Gly Leu Pro Pro Val Leu Leu			
785	790	795	800
Pro Gly Met Asn Gly Pro Ser Ser Leu Pro Gly Phe Pro Gln Asn Ser			
	805	810	815
Asn Thr Leu Thr Pro Pro Gly Ala Gly Met Leu Gly Phe Pro Thr Ser			
	820	825	830
Ala Thr Ser Ser Pro Ala Leu Ser Leu Ser Ser Ala Pro Thr Lys Pro			
	835	840	845
Leu Leu Gln Thr Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro			
	850	855	860
Ser Ser Ser Leu Ser Gly Gln Gln Thr Glu Gln Gln Asn Lys Glu Ser			
865	870	875	880
Glu Lys Lys Gln Thr Lys Pro Asn Lys Val Lys Lys Ile Lys Glu Glu			
	885	890	895
Glu Leu Glu Ala Thr Lys Pro Glu Lys His Pro			
	900	905	

<210> 4775

<211> 412

<212> PRT

<213> Homo sapiens

<400> 4775

Met Thr Phe Thr Phe Gln Ser Glu Asp Leu Lys Arg Asp Cys Gly Lys

1	5	10	15
Lys Met Ser His Gln His Val Phe Ser Leu Ala Met Glu Glu Asp Val			
20	25	30	
Lys Thr Ala Asp Thr Lys Lys Ala Ser Arg Ile Leu Asp His Glu Lys			
35	40	45	
Glu Asn Thr Arg Ser Ile Cys Leu Leu Glu Gln Lys Arg Lys Val Val			
50	55	60	
Ser Ser Asn Ile Asp Val Pro Pro Ala Arg Lys Ser Ser Glu Glu Leu			
65	70	75	80
Asp Met Asp Lys Val Thr Ala Ala Met Val Leu Thr Ser Leu Ser Thr			
85	90	95	
Ser Pro Leu Val Arg Ser Pro Pro Val Arg Pro Asn Glu Ser Leu Ser			
100	105	110	
Gly Ser Trp Lys Glu Gly Gly Cys Val Pro Ser Ser Thr Ser Ser Ser			
115	120	125	
Gly Tyr Trp Ser Trp Ser Ala Pro Ser Asp Gln Ser Asn Pro Ser Thr			
130	135	140	
Pro Ser Pro Pro Leu Ser Ala Asp Ser Phe Lys Pro Phe Arg Ser Pro			
145	150	155	160
Ala Gln Pro Asp Asp Gly Ile Asp Glu Ala Glu Ala Ser Asn Leu Leu			
165	170	175	
Phe Asp Glu Pro Ile Pro Arg Lys Arg Lys Asn Ser Met Lys Val Met			
180	185	190	
Phe Lys Cys Leu Trp Lys Asn Cys Gly Lys Val Leu Ser Thr Ala Ala			
195	200	205	
Gly Ile Gln Lys His Ile Arg Thr Ile His Leu Gly Arg Val Gly Asp			
210	215	220	
Ser Asp Tyr Ser Asp Gly Glu Glu Asp Phe Tyr Tyr Thr Glu Ile Lys			
225	230	235	240
Leu Asn Thr Asp Ser Val Ala Asp Gly Leu Ser Ser Leu Ala Pro Val			
245	250	255	
Ser Pro Ser Gln Ser Leu Ala Ser Pro Pro Thr Phe Pro Ile Pro Asp			
260	265	270	
Ser Ser Arg Thr Glu Thr Pro Cys Ala Lys Thr Glu Thr Lys Leu Met			
275	280	285	
Thr Pro Leu Ser Arg Ser Ala Pro Thr Thr Leu Tyr Leu Val His Thr			

290	295	300	
Asp His Ala Tyr Gln Ala Thr Pro Pro Val Thr Ile Pro Gly Ser Ala			
305	310	315	320
Lys Phe Thr Pro Asn Gly Ser Ser Phe Ser Ile Ser Trp Gln Ser Pro			
	325	330	335
Pro Val Thr Phe Thr Gly Ile Pro Val Ser Pro Thr His His Pro Val			
	340	345	350
Gly Thr Gly Glu Gln Arg Gln His Ala His Thr Val Leu Ser Ser Pro			
	355	360	365
Pro Arg Gly Thr Val Ser Leu Arg Lys Pro Arg Gly Glu Gly Lys Lys			
	370	375	380
Cys Arg Lys Val Tyr Gly Met Glu Asn Arg Asp Met Trp Cys Thr Ala			
385	390	395	400
Cys Arg Trp Lys Lys Ala Cys Gln Arg Phe Leu Asp			
	405	410	

<210> 4776

<211> 314

<212> PRT

<213> Homo sapiens

<400> 4776

Met Thr Gly Ser Asn Ser His Ile Thr Ile Leu Thr Leu Asn Val Asn			
1	5	10	15
Gly Leu Asn Ala Pro Ile Lys Arg His Arg Leu Ala Asn Trp Ile Lys			
	20	25	30
Ser Gln Asp Pro Ser Val Cys Cys Ile Gln Glu Thr His Leu Thr Cys			
	35	40	45
Arg Asp Thr His Arg Leu Lys Ile Lys Gly Trp Arg Lys Ile Tyr Gln			
	50	55	60
Ala Ser Gly Lys Gln Lys Lys Ala Gly Val Ala Ile Leu Val Ser Asp			
	65	70	75
Lys Thr Asp Phe Lys Pro Thr Lys Ile Lys Arg Asp Lys Glu Gly His			
	85	90	95
Tyr Thr Met Val Lys Gly Ser Ile Gln Gln Glu Glu Leu Thr Ile Leu			

100	105	110
Asn Ile Tyr Ala Pro Asn Thr Gly Ala Pro Arg Phe Ile Lys Gln Val		
115	120	125
Leu Ser Asp Val Gln Arg Asp Leu Asp Ser His Thr Leu Ile Met Gly		
130	135	140
Asp Phe Asn Thr Pro Leu Ser Thr Leu Asp Arg Ser Thr Arg Gln Lys		
145	150	155
Val Asn Lys His Thr Gln Glu Phe Asn Ser Ala Leu His Gln Ala Asp		
165	170	175
Leu Ile Asp Ile Tyr Lys Thr Leu His Pro Lys Ser Thr Glu Tyr Thr		
180	185	190
Phe Phe Ser Ala Pro His His Thr Tyr Ser Lys Ile Asp His Ile Phe		
195	200	205
Gly Ser Lys Ala Leu Phe Ser Lys Cys Lys Arg Thr Glu Ile Ile Thr		
210	215	220
Asn Cys Leu Ser Glu His Ser Ala Ile Lys Leu Glu Leu Arg Ile Lys		
225	230	235
Asn Leu Thr Gln Asn Arg Ser Thr Thr Trp Lys Leu Asn Asn Leu Leu		
245	250	255
Leu Asn Asp Tyr Trp Val His Asn Glu Met Lys Ala Glu Ile Lys Met		
260	265	270
Phe Phe Glu Thr Asn Glu Asn Lys Asp Thr Thr Tyr Gln Asn Leu Trp		
275	280	285
Asp Ala Phe Lys Ala Val Cys Thr Gly Lys Phe Ile Ala Leu Asn Ala		
290	295	300
His Lys Arg Lys Lys Glu Arg Lys Lys Glu		
305	310	

<210> 4777

<211> 264

<212> PRT

<213> Homo sapiens

<400> 4777

Met Thr Gly Ser Asn Ser His Ile Thr Ile Leu Thr Leu Asn Val Asn

1	5	10	15
Gly Leu Asn Thr Pro Ile Lys Arg His Arg Leu Ala Ser Trp Ile Lys			
20	25	30	
Ser Gln Asp Pro Ser Val Cys Cys Ile Gln Glu Thr His Leu Ile Cys			
35	40	45	
Lys Asp Ala Tyr Arg Leu Lys Ile Lys Gly Trp Arg Lys Ile Tyr Gln			
50	55	60	
Ala Asn Arg Lys Gln Lys Lys Ala Gly Val Ala Ile Leu Val Ser Asp			
65	70	75	80
Lys Ser Asp Phe Lys Pro Thr Lys Ile Lys Arg Asp Lys Lys Gly His			
85	90	95	
Tyr Ile Met Val Lys Gly Ser Met Gln Gln Glu Glu Leu Thr Ile Leu			
100	105	110	
Asn Ile Tyr Ala Pro Asn Thr Gly Ala Pro Arg Phe Ile Asn Glu Val			
115	120	125	
Leu Arg Asp Pro Gln Arg Asn Leu Asp Ser His Thr Ile Ile Met Gly			
130	135	140	
Asp Phe Asn Thr Pro Leu Ser Ile Phe Asp Arg Ser Thr Arg Gln Lys			
145	150	155	160
Val Asn Lys Asp Thr Gln Asp Leu Asn Leu Thr Leu Gln Gln Ala Asp			
165	170	175	
Leu Arg Asp Ile Tyr Arg Thr Leu His Pro Lys Ser Thr Glu Tyr Thr			
180	185	190	
Phe Phe Ser Ala Leu His His Thr Tyr Ser Lys Thr Asp His Ile Leu			
195	200	205	
Gly Ser Lys Ala Leu Leu Ser Lys Cys Lys Arg Thr Glu Ile Thr Thr			
210	215	220	
Asn Cys Leu Ser Asp His Ser Ala Ile Lys Leu Glu Leu Arg Ile Lys			
225	230	235	240
Lys Leu Thr Gln Tyr His Ile Ser Thr Trp Lys Leu Asn Asn Leu Leu			
245	250	255	
Leu Asn Asp Tyr Trp Val Asn Asn			
260			

<211> 852

<212> PRT

<213> Homo sapiens

<400> 4778

Met Leu Ile Thr Glu Arg Lys His Phe Arg Ser Gly Arg Ile Ala Gln
 1 5 10 15
 Ser Met Ser Glu Ala Asn Leu Ile Asp Met Glu Ala Gly Lys Val Ser
 20 25 30
 Lys Ser Cys Asn Ile Thr Glu Cys Gln Asp Pro Asp Leu Leu His Asn
 35 40 45
 Trp Pro Asp Ala Phe Thr Leu Arg Gly Asn Asn Ala Ser Lys Val Ala
 50 55 60
 Asn Pro Phe Trp Asn Gln Leu Ser Ala Ser Asn Pro Phe Leu Asp Asp
 65 70 75 80
 Ile Thr Gln Leu Arg Asn Asn Arg Lys Arg Asn Asn Ile Ser Ile Leu
 85 90 95
 Lys Glu Asp Pro Phe Leu Phe Cys Arg Glu Ile Glu Asn Gly Asn Ser
 100 105 110
 Phe Asp Ser Ser Gly Asp Glu Leu Asp Val His Gln Leu Leu Arg Gln
 115 120 125
 Thr Ser Ser Arg Asn Ser Gly Arg Ser Lys Ser Val Ser Glu Leu Leu
 130 135 140
 Asp Ile Leu Asp Asp Thr Ala His Ala His Gln Ser Ile His Asn Ser
 145 150 155 160
 Asp Gln Ile Leu Leu His Asp Leu Glu Trp Pro Lys Asn Asp Arg Glu
 165 170 175
 Ala Tyr Lys Met Ala Trp Leu Ser Gln Arg Gln Leu Ala Arg Ser Cys
 180 185 190
 Leu Asp Leu Asn Thr Ile Ser Gln Ser Pro Gly Trp Ala Gln Thr Gln
 195 200 205
 Leu Ala Glu Val Thr Ile Ala Cys Lys Val Asn His Gln Gly Gly Ser
 210 215 220
 Val Gln Leu Pro Glu Ser Asp Ile Thr Val His Val Pro Gln Gly His
 225 230 235 240
 Val Ala Val Gly Glu Phe Gln Glu Val Ser Leu Arg Ala Phe Leu Asp

245	250	255
Pro Pro His Met Leu Asn His Asn Leu Ser Cys Thr Val Ser Pro Leu		
260	265	270
Leu Glu Ile Met Leu Gly Asn Leu Asn Thr Met Glu Ala Leu Leu Leu		
275	280	285
Glu Met Lys Ile Gly Ala Glu Val Arg Lys Asp Pro Phe Ser Gln Val		
290	295	300
Met Thr Glu Met Val Cys Leu His Ser Leu Gly Lys Glu Gly Pro Phe		
305	310	315
Lys Val Leu Ser Asn Cys Tyr Ile Tyr Lys Asp Thr Ile Gln Val Lys		
325	330	335
Leu Ile Asp Leu Ser Gln Val Met Tyr Leu Val Val Ala Ala Gln Ala		
340	345	350
Lys Ala Leu Pro Ser Pro Ala Ala Thr Ile Trp Asp Tyr Ile His Lys		
355	360	365
Thr Thr Ser Ile Gly Ile Tyr Gly Pro Lys Tyr Ile His Pro Asn Phe		
370	375	380
Thr Val Val Leu Thr Val Cys Gly His Asn Tyr Met Pro Gly Gln Leu		
385	390	395
Thr Ile Ser Asp Ile Lys Lys Gly Gly Lys Asn Ile Ser Pro Val Val		
405	410	415
Phe Gln Leu Trp Gly Lys Gln Ser Phe Leu Leu Asp Lys Pro Gln Asp		
420	425	430
Leu Ser Ile Ser Ile Phe Ser Cys Asp Pro Asp Phe Glu Val Lys Thr		
435	440	445
Glu Gly Glu Arg Lys Glu Ile Lys Gln Lys Gln Leu Glu Ala Gly Glu		
450	455	460
Val Val His Gln Gln Phe Leu Phe Ser Leu Val Glu His Arg Glu Met		
465	470	475
His Leu Phe Asp Phe Cys Val Gln Val Glu Pro Pro Asn Gly Glu Pro		
485	490	495
Val Ala Gln Phe Ser Ile Thr Thr Pro Asp Pro Thr Pro Asn Leu Lys		
500	505	510
Arg Leu Leu Asn Leu Pro Gly Tyr Leu Gln Lys Lys Glu Glu Ile Lys		
515	520	525

Ser Ala Pro Leu Ser Pro Lys Ile Leu Val Lys Tyr Pro Thr Phe Gln
 530 535 540
 Asp Lys Thr Leu Asn Phe Ser Asn Tyr Gly Val Thr Leu Lys Ala Val
 545 550 555 560
 Leu Arg Gln Ser Lys Ile Asp Tyr Phe Leu Glu Tyr Phe Lys Gly Asp
 565 570 575
 Thr Ile Ala Leu Leu Gly Glu Gly Lys Val Lys Ala Ile Gly Gln Ser
 580 585 590
 Lys Val Lys Glu Trp Tyr Val Gly Val Leu Arg Gly Lys Ile Gly Leu
 595 600 605
 Val His Cys Lys Asn Val Lys Val Ile Ser Lys Glu Gln Val Met Phe
 610 615 620
 Met Ser Asp Ser Val Phe Thr Thr Arg Asn Leu Leu Glu Gln Ile Val
 625 630 635 640
 Leu Pro Leu Lys Lys Leu Thr Tyr Ile Tyr Ser Val Val Leu Thr Leu
 645 650 655
 Val Ser Glu Lys Val Tyr Asp Trp Lys Val Leu Ala Asp Val Leu Gly
 660 665 670
 Tyr Ser His Leu Ser Leu Glu Asp Phe Asp Gln Ile Gln Ala Asp Lys
 675 680 685
 Glu Ser Glu Lys Val Ser Tyr Val Ile Lys Lys Leu Lys Glu Asp Cys
 690 695 700
 His Thr Glu Arg Asn Thr Arg Lys Phe Leu Tyr Glu Leu Ile Val Ala
 705 710 715 720
 Leu Leu Lys Met Asp Cys Gln Glu Leu Val Ala Arg Leu Ile Gln Glu
 725 730 735
 Ala Ala Val Leu Thr Ser Ala Val Lys Leu Gly Lys Gly Trp Arg Glu
 740 745 750
 Leu Ala Glu Lys Leu Val Arg Leu Thr Lys Gln Gln Met Glu Ala Tyr
 755 760 765
 Glu Ile Pro His Arg Gly Asn Thr Gly Asp Val Ala Val Glu Met Met
 770 775 780
 Trp Lys Pro Ala Tyr Asp Phe Leu Tyr Thr Trp Ser Ala His Tyr Gly
 785 790 795 800
 Asn Asn Tyr Thr Asp Val Leu Gln Asp Leu Gln Ser Ala Leu Asp Arg
 805 810 815

Met Lys Asn Pro Val Thr Lys His Trp Arg Glu Leu Thr Gly Val Leu
 820 825 830
 Ile Leu Val Asn Ser Leu Glu Val Leu Arg Val Thr Ala Phe Ser Thr
 835 840 845
 Ser Glu Glu Val
 850

<210> 4779

<211> 865

<212> PRT

<213> Homo sapiens

<400> 4779

Met Ser Leu Gln Asp Ser Thr Leu Ser Arg Glu Gly Lys Pro Glu Gly
 1 5 10 15
 Glu Ile Met Ala Ala Val Phe Phe Ser Val Gly Arg Leu Ser Pro Glu
 20 25 30
 Val Thr Gln Pro Asp Glu Asp Leu His Leu Gln Ala Glu Glu Thr Gln
 35 40 45
 Leu Val Lys Glu Ser Val Thr Phe Lys Asp Val Ala Ile Asp Phe Thr
 50 55 60
 Leu Glu Glu Trp Arg Leu Met Asp Pro Thr Gln Arg Asn Leu His Lys
 65 70 75 80
 Asp Val Met Leu Glu Asn Tyr Arg Asn Leu Val Ser Leu Gly Leu Ala
 85 90 95
 Val Ser Lys Pro Asp Met Ile Ser His Leu Glu Asn Gly Lys Gly Pro
 100 105 110
 Trp Val Thr Val Arg Glu Ile Ser Arg Ile Pro Tyr Pro Asp Met Glu
 115 120 125
 Pro Lys Pro Ala Thr Lys Asn Ala Thr Arg Thr Lys Ala Ile Ser Glu
 130 135 140
 Asp Leu Ser Gln Glu Ala Ile Leu Glu Lys Leu Thr Glu Asn Gly Leu
 145 150 155 160
 Trp Asp Ser Arg Met Glu Gly Leu Trp Lys Trp Asn Asp Arg Ile Leu
 165 170 175

Arg Leu Gln Asn Asn Gln Glu Asn His Leu Ser Gln Arg Ile Ile Pro			
180	185	190	
Leu Lys Lys Thr Pro Thr Ser Gln Arg Gly Phe Arg Phe Glu Ser Ile			
195	200	205	
Leu Ile Pro Glu Pro Gly Ile Ala Thr Glu Glu Leu His Ser Arg Cys			
210	215	220	
Gln Thr Gln Glu Glu Asn Phe Thr Glu Asn Leu Asn Leu Ile Thr Asp			
225	230	235	240
Thr His Leu Gly Lys Ile Ile Cys Lys Glu Met Lys Gly Ser Lys Ala			
245	250	255	
Ile Arg Gln Thr Ser Glu Leu Thr Leu Gly Lys Lys Ser Asn Asn Lys			
260	265	270	
Glu Lys Pro Tyr Lys Cys Ser Thr Cys Glu Lys Ala Phe His Tyr Arg			
275	280	285	
Ser Leu Leu Ile Gln His Gln Arg Thr His Thr Lys Glu Lys Pro Tyr			
290	295	300	
Glu Cys Asn Glu Cys Gly Lys Thr Phe Ser Gln Pro Ser Tyr Leu Ser			
305	310	315	320
Gln His Lys Lys Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu			
325	330	335	
Cys Gly Lys Ala Phe Ile Ala Ser Ser Ser Leu Met Val His Gln Arg			
340	345	350	
Ile His Thr Lys Glu Lys Pro Tyr Gln Cys Asn Val Cys Gly Lys Ser			
355	360	365	
Phe Ser Gln Cys Ala Arg Leu Asn Gln His Gln Arg Ile Gln Thr Gly			
370	375	380	
Glu Lys Pro Tyr Lys Cys Ser Glu Cys Gly Lys Ala Phe Ser Asp Lys			
385	390	395	400
Ser Lys Leu Ala Arg His Gln Glu Thr His Asn Gly Glu Lys Pro Tyr			
405	410	415	
Lys Cys Asp Asp Cys Gly Lys Ala Phe Arg Asn Lys Ser Tyr Leu Ser			
420	425	430	
Val His Gln Lys Thr His Thr Glu Glu Lys Pro Tyr Gln Cys Asn Glu			
435	440	445	
Cys Gly Lys Ser Phe Lys Asn Thr Thr Ile Phe Asn Val His Gln Arg			
450	455	460	

Ile His Thr Gly Glu Lys Pro Phe Arg Cys Asn Glu Cys Gly Lys Ala
 465 470 475 480
 Tyr Arg Ser Asn Ser Ser Leu Ile Val His Ile Arg Thr His Thr Gly
 485 490 495
 Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Asn Arg Ile
 500 505 510
 Ala Asn Phe Thr Glu His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
 515 520 525
 Lys Cys Asn Glu Cys Gly Lys Ala Phe Ile Asn Tyr Ser Cys Leu Thr
 530 535 540
 Val His His Arg Met His Thr Gly Glu Lys Pro Tyr Lys Cys Thr Glu
 545 550 555 560
 Cys Gly Lys Ala Phe Met Arg Ser Ser Ser Leu Ile Ile His Gln Cys
 565 570 575
 Ile His Thr Glu Glu Lys Pro Tyr Leu Cys Asn Glu Cys Gly Glu Ser
 580 585 590
 Phe Arg Ile Lys Ser His Leu Thr Val His Gln Arg Ile His Thr Gly
 595 600 605
 Glu Lys Pro Tyr Lys Cys Thr Asp Cys Glu Arg Ala Phe Thr Lys Met
 610 615 620
 Val Asn Leu Lys Glu His Gln Lys Ile His Thr Gly Val Lys Pro Tyr
 625 630 635 640
 Lys Cys Tyr Asp Cys Gly Lys Ser Phe Arg Thr Lys Ser Tyr Leu Ile
 645 650 655
 Val His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu
 660 665 670
 Cys Glu Lys Ala Phe Thr Asn Thr Ser Gln Leu Thr Val His Gln Arg
 675 680 685
 Arg His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val
 690 695 700
 Phe Thr Ser Asn Ser Gly Phe Asn Thr His Gln Arg Thr His Thr Gly
 705 710 715 720
 Glu Lys Pro Phe Lys Cys Asn Asp Cys Gly Lys Ala Phe Ser Gln Met
 725 730 735
 Val His Val Thr Glu His Gln Lys Ile His Ser Gly Glu Lys Pro Tyr
 740 745 750

Lys Cys Asp Val Cys Gly Lys Ala Phe Arg Arg Gly Ser Tyr Leu Thr
 755 760 765
 Val His Trp Arg Thr His Thr Gly Glu Lys Pro Tyr Thr Cys Lys Glu
 770 775 780
 Cys Gly Lys Gly Cys Ile Thr Leu Ser Gln Leu Thr Leu His Gln Arg
 785 790 795 800
 Ile His Thr Gly Glu Arg Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala
 805 810 815
 Phe Arg Thr Asn Ser Asp Phe Thr Val His Leu Arg Met His Thr Gly
 820 825 830
 Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Arg Ser Ser
 835 840 845
 Ser Ser Leu Thr Val His Gln Arg Ile His Gln Arg Glu Thr Gln Leu
 850 855 860
 Ile
 865

<210> 4780

<211> 547

<212> PRT

<213> Homo sapiens

<400> 4780

Met Leu Glu Gly Arg Gln Thr Pro Ala Ser Thr Leu Glu Gln Asp Ala
 1 5 10 15
 Thr Asp Tyr Arg Leu Arg Ser Leu Arg Lys Leu Leu Ala Gln Pro Arg
 20 25 30
 Glu Gly Leu Leu Ala Pro Phe Ser Lys Arg Asn Ser Thr Ala Ser Phe
 35 40 45
 Pro Gly Arg Thr Ser His Ile Pro Val Gln Gln Pro Glu Lys Arg Lys
 50 55 60
 Gln Lys Pro Ser Pro Glu Pro Ser Gln Asp Ser Pro His Ser Asp Lys
 65 70 75 80
 Trp Pro Pro Gly His Pro Val Lys Asn Leu Pro Gln Met Arg Gly Pro
 85 90 95

Arg Pro Arg Pro Ala Gly Asp Ser Pro Arg Lys Thr Gln Trp Leu Asn
 100 105 110
 Gln Val Glu Ser Tyr Ile Ala Glu Gln Arg Arg Gly Asp Arg Met Arg
 115 120 125
 Pro Gln Ala Pro Gly Arg Gly Trp His Gly Glu Glu Glu Val Val Ala
 130 135 140
 Ala Ala Gly Gln Glu Gly Gln Val Glu Gly Glu Glu Glu Gly Glu Glu
 145 150 155 160
 Glu Glu Glu Glu Glu Asp Met Ser Glu Val Phe Glu Tyr Val Pro Val
 165 170 175
 Phe Asp Pro Val Val Asn Trp Asp Gln Thr Phe Ser Ala Arg Asn Leu
 180 185 190
 Asp Phe Gln Ala Leu Arg Thr Asp Trp Ile Asp Leu Ser Cys Asn Thr
 195 200 205
 Ser Gly Asn Leu Leu Leu Pro Glu Gln Glu Ala Leu Glu Val Thr Arg
 210 215 220
 Val Phe Leu Lys Lys Leu Asn Gln Arg Ser Arg Gly Arg Tyr Gln Leu
 225 230 235 240
 Gln Arg Ile Val Asn Val Glu Lys Arg Gln Asp Gln Leu Arg Gly Gly
 245 250 255
 Arg Tyr Leu Leu Glu Leu Glu Leu Leu Glu Gln Gly Gln Arg Val Val
 260 265 270
 Arg Leu Ser Glu Tyr Val Ser Ala Arg Gly Trp Gln Gly Ile Asp Pro
 275 280 285
 Ala Gly Gly Glu Glu Val Glu Ala Arg Asn Leu Gln Gly Leu Val Trp
 290 295 300
 Asp Pro His Asn Arg Arg Arg Gln Val Leu Asn Thr Arg Ala Gln Glu
 305 310 315 320
 Pro Lys Leu Cys Trp Pro Gln Gly Phe Ser Trp Ser His Arg Ala Val
 325 330 335
 Val His Phe Val Val Pro Val Lys Asn Gln Ala Arg Trp Val Gln Gln
 340 345 350
 Phe Ile Lys Asp Met Glu Asn Leu Phe Gln Val Thr Gly Asp Pro His
 355 360 365
 Phe Asn Ile Val Ile Thr Asp Tyr Ser Ser Glu Asp Met Asp Val Glu
 370 375 380

Met Ala Leu Lys Arg Ser Lys Leu Arg Ser Tyr Gln Tyr Val Lys Leu
 385 390 395 400
 Ser Gly Asn Phe Glu Arg Ser Ala Gly Leu Gln Ala Gly Ile Asp Leu
 405 410 415
 Val Lys Asp Pro His Ser Ile Ile Phe Leu Cys Asp Leu His Ile His
 420 425 430
 Phe Pro Ala Gly Val Ile Asp Ala Ile Arg Lys His Cys Val Glu Gly
 435 440 445
 Lys Met Ala Phe Ala Pro Met Val Met Arg Leu His Cys Gly Ala Thr
 450 455 460
 Pro Gln Trp Pro Glu Gly Tyr Trp Glu Val Asn Gly Phe Gly Leu Leu
 465 470 475 480
 Gly Ile Tyr Lys Ser Asp Leu Asp Arg Ile Gly Gly Met Asn Thr Lys
 485 490 495
 Glu Phe Arg Asp Arg Trp Gly Gly Glu Asp Trp Glu Leu Leu Asp Arg
 500 505 510
 Ile Leu Gln Ala Gly Leu Asp Val Glu Arg Leu Ser Leu Arg Asn Phe
 515 520 525
 Phe His His Phe His Ser Lys Arg Gly Met Trp Ser Arg Arg Gln Met
 530 535 540
 Lys Thr Leu
 545

<210> 4781

<211> 443

<212> PRT

<213> Homo sapiens

<400> 4781

Met Ser Gln Arg Gln Tyr Pro Glu Cys Tyr Leu Ala Pro Asn Gly Cys
 1 5 10 15
 Leu Val Ser Asn Cys Gly Val Asn Lys Met Ser Asn Glu Glu Leu Val
 20 25 30
 Gly Gln Asn His Gly Met Glu Gly Glu Ala Cys Thr Gly Gly Asp Val
 35 40 45

Thr Phe Ser Asp Val Ala Ile Asp Phe Ser His Glu Glu Trp Ala Cys
 50 55 60
 Leu Asp Ser Ala Gln Arg Asp Leu Tyr Lys Asp Val Met Val Gln Asn
 65 70 75 80
 Tyr Glu Asn Leu Val Ser Val Gly Leu Ser Val Thr Lys Pro Tyr Val
 85 90 95
 Ile Met Leu Leu Glu Asp Gly Lys Glu Pro Trp Met Met Glu Lys Lys
 100 105 110
 Leu Ser Lys Asp Trp Glu Ser Arg Trp Glu Asn Lys Glu Leu Ser Thr
 115 120 125
 Lys Lys Asp Ile Tyr Asp Glu Asp Ser Pro Gln Pro Val Thr Met Glu
 130 135 140
 Lys Val Val Lys Gln Ser Tyr Glu Phe Ser Asn Ser Asn Lys Asn Leu
 145 150 155 160
 Glu Tyr Thr Glu Cys Asp Thr Phe Arg Ser Thr Phe His Ser Lys Ser
 165 170 175
 Thr Leu Ser Glu Pro Gln Asn Asn Ser Ala Glu Gly Asn Ser His Lys
 180 185 190
 Tyr Asp Ile Leu Lys Lys Asn Leu Ser Lys Lys Ser Val Ile Lys Ser
 195 200 205
 Glu Arg Ile Asn Gly Gly Lys Lys Leu Leu Asn Ser Asn Lys Ser Gly
 210 215 220
 Ala Ala Phe Asn Gln Ser Lys Ser Leu Thr Leu Pro Gln Thr Cys Asn
 225 230 235 240
 Arg Glu Lys Ile Tyr Thr Cys Ser Glu Cys Gly Lys Ala Phe Gly Lys
 245 250 255
 Gln Ser Ile Leu Asn Arg His Trp Arg Ile His Thr Gly Glu Lys Pro
 260 265 270
 Tyr Glu Cys Arg Glu Cys Gly Lys Thr Phe Ser His Gly Ser Ser Leu
 275 280 285
 Thr Arg His Gln Ile Ser His Ser Gly Glu Lys Pro Tyr Lys Cys Ile
 290 295 300
 Glu Cys Gly Lys Ala Phe Ser His Gly Ser Ser Leu Thr Asn His Gln
 305 310 315 320
 Ser Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Met Asn Cys Gly Lys
 325 330 335

Ser Phe Ser Arg Val Ser Leu Leu Ile Gln His Leu Arg Ile His Thr
 340 345 350
 Gln Glu Lys Arg Tyr Glu Cys Arg Ile Cys Gly Lys Ala Phe Ile His
 355 360 365
 Ser Ser Ser Leu Ile His His Gln Lys Ser His Thr Gly Glu Lys Pro
 370 375 380
 Tyr Glu Cys Arg Glu Cys Gly Lys Ala Phe Cys Cys Ser Ser His Leu
 385 390 395 400
 Thr Gln His Gln Arg Ile His Ser Met Lys Lys Lys Tyr Glu Cys Asn
 405 410 415
 Lys Cys Leu Lys Val Phe Ser Ser Phe Ser Phe Leu Val Gln His Gln
 420 425 430
 Ser Ile His Thr Glu Glu Lys Pro Phe Glu Val
 435 440

<210> 4782

<211> 649

<212> PRT

<213> Homo sapiens

<400> 4782

Met Met Trp Gln Cys His Leu Ser Ala Gln Asp Tyr Arg Tyr Tyr Pro
 1 5 10 15
 Val Asp Gly Tyr Ser Leu Leu Lys Arg Phe Pro Leu His Pro Leu Thr
 20 25 30
 Gly Pro Arg Cys Pro Val Gln Thr Val Gly Gln Trp Leu Glu Ser Ile
 35 40 45
 Gly Leu Pro Gln Tyr Glu Asn His Leu Met Ala Asn Gly Phe Asp Asn
 50 55 60
 Val Gln Phe Met Gly Ser Asn Val Met Glu Asp Gln Asp Leu Leu Glu
 65 70 75 80
 Ile Gly Ile Leu Asn Ser Gly His Arg Gln Arg Ile Leu Gln Ala Ile
 85 90 95
 Gln Leu Leu Pro Lys Met Arg Pro Ile Gly His Asp Gly Tyr His Pro
 100 105 110

Thr Ser Val Ala Glu Trp Leu Asp Ser Ile Glu Leu Gly Asp Tyr Thr
 115 120 125
 Lys Ala Phe Leu Ile Asn Gly Tyr Thr Ser Met Asp Leu Leu Lys Lys
 130 135 140
 Ile Trp Glu Val Glu Leu Ile Asn Glu Trp Asn Ile Thr Lys Leu Ser
 145 150 155 160
 Ile Glu Tyr Asp Ser Glu Pro Phe Gly Lys Glu Arg Asp Ala Ala Ile
 165 170 175
 Lys Lys Leu Ala Thr Glu Ala Gly Val Glu Val Ile Val Arg Ile Ser
 180 185 190
 His Thr Leu Tyr Asp Leu Asp Lys Ile Ile Glu Leu Asn Gly Gly Gln
 195 200 205
 Pro Pro Leu Thr Tyr Lys Arg Phe Gln Thr Leu Ile Ser Lys Met Glu
 210 215 220
 Pro Leu Glu Ile Pro Val Glu Thr Ile Thr Ser Glu Val Ile Glu Lys
 225 230 235 240
 Cys Thr Thr Pro Leu Ser Asp Asp His Asp Glu Lys Tyr Gly Val Pro
 245 250 255
 Ser Leu Glu Glu Leu Gly Phe Asp Thr Asp Gly Leu Ser Ser Ala Val
 260 265 270
 Trp Pro Gly Gly Glu Thr Glu Ala Leu Thr Arg Leu Glu Arg His Leu
 275 280 285
 Glu Arg Lys Ala Trp Val Ala Asn Phe Glu Arg Pro Arg Met Asn Ala
 290 295 300
 Asn Ser Leu Leu Ala Ser Pro Thr Gly Leu Ser Pro Tyr Leu Arg Phe
 305 310 315 320
 Gly Cys Leu Ser Cys Arg Leu Phe Tyr Phe Lys Leu Thr Asp Leu Tyr
 325 330 335
 Lys Lys Val Lys Lys Asn Ser Ser Pro Pro Leu Ser Leu Tyr Gly Gln
 340 345 350
 Leu Leu Trp Arg Glu Phe Phe Tyr Thr Ala Ala Thr Asn Asn Pro Arg
 355 360 365
 Phe Asp Lys Met Glu Gly Asn Pro Ile Cys Val Gln Ile Pro Trp Asp
 370 375 380
 Lys Asn Pro Glu Ala Leu Ala Lys Trp Ala Glu Gly Arg Thr Gly Phe

385 390 395 400
 Pro Trp Ile Asp Ala Ile Met Thr Gln Leu Arg Gln Glu Gly Trp Ile
 405 410 415
 His His Leu Ala Arg His Ala Val Ala Cys Phe Leu Thr Arg Gly Asp
 420 425 430
 Leu Trp Ile Ser Trp Glu Glu Gly Met Lys Val Phe Glu Glu Leu Leu
 435 440 445
 Leu Asp Ala Asp Trp Ser Ile Asn Ala Gly Ser Trp Met Trp Leu Ser
 450 455 460
 Cys Ser Ser Phe Phe Gln Gln Phe Phe His Cys Tyr Cys Pro Val Gly
 465 470 475 480
 Phe Gly Arg Arg Thr Asp Pro Asn Gly Asp Tyr Ile Arg Arg Tyr Leu
 485 490 495
 Pro Val Leu Arg Gly Phe Pro Ala Lys Tyr Ile Tyr Asp Pro Trp Asn
 500 505 510
 Ala Pro Glu Gly Ile Gln Lys Val Ala Lys Cys Leu Ile Gly Val Asn
 515 520 525
 Tyr Pro Lys Pro Met Val Asn His Ala Glu Ala Ser Arg Leu Asn Ile
 530 535 540
 Glu Arg Met Lys Gln Ile Tyr Gln Gln Leu Ser Arg Tyr Arg Gly Leu
 545 550 555 560
 Gly Leu Leu Ala Ser Val Pro Ser Asn Pro Asn Gly Asn Gly Gly Phe
 565 570 575
 Met Gly Tyr Ser Ala Glu Asn Ile Pro Gly Cys Ser Ser Ser Gly Ser
 580 585 590
 Cys Ser Gln Gly Ser Gly Ile Leu His Tyr Ala His Gly Asp Ser Gln
 595 600 605
 Gln Thr His Leu Leu Lys Gln Gly Arg Ser Ser Met Gly Thr Gly Leu
 610 615 620
 Ser Gly Gly Lys Arg Pro Ser Gln Glu Glu Asp Thr Gln Ser Ile Gly
 625 630 635 640
 Pro Lys Val Gln Arg Gln Ser Thr Asn
 645

<211> 337

<212> PRT

<213> Homo sapiens

<400> 4783

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Met Pro Gly Leu Pro Cys Pro Ala Leu Pro Cys Pro Ala Pro Pro Pro
  1              5              10              15
Ala Pro Ser Cys Leu Ile Ala Met Ala Leu Lys Asn Ser Lys Thr Gly
      20              25              30
Ser Leu Pro Val Ser Glu Ile Tyr Ser Phe Met Lys Glu His Phe Pro
      35              40              45
Tyr Phe Lys Thr Ala Pro Asp Gly Trp Lys Asn Ser Val Arg His Asn
      50              55              60
Leu Ser Leu Asn Lys Cys Phe Glu Lys Val Glu Asn Lys Met Ser Gly
      65              70              75              80
Ser Ser Arg Lys Gly Cys Leu Trp Ala Leu Asn Leu Ala Arg Ile Asp
      85              90              95
Lys Met Glu Glu Glu Met His Lys Trp Lys Arg Lys Asp Leu Ala Ala
      100             105             110
Ile His Arg Ser Met Ala Asn Pro Glu Glu Leu Asp Lys Leu Ile Ser
      115             120             125
Asp Arg Pro Glu Ser Cys Arg Arg Pro Gly Lys Pro Gly Glu Pro Glu
      130             135             140
Ala Pro Val Leu Thr His Ala Thr Thr Val Ala Val Ala His Gly Cys
      145             150             155             160
Leu Ala Val Ser Gln Leu Pro Pro Gln Pro Leu Met Thr Leu Ser Leu
      165             170             175
Gln Ser Val Pro Leu His His Gln Val Gln Pro Gln Ala His Leu Ala
      180             185             190
Pro Asp Ser Pro Ala Pro Ala Gln Thr Pro Pro Leu His Ala Leu Pro
      195             200             205
Asp Leu Ser Pro Ser Pro Leu Pro His Pro Ala Met Gly Arg Ala Pro
      210             215             220
Val Asp Phe Ile Asn Ile Ser Thr Asp Met Asn Thr Glu Val Asp Ala
      225             230             235             240
Leu Asp Pro Ser Ile Met Asp Phe Ala Leu Gln Gly Asn Leu Trp Glu

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	245		250		255
Glu Met Lys Asp Glu Gly Phe Ser Leu Asp Thr Leu Gly Ala Phe Ala					
	260		265		270
Asp Ser Pro Leu Gly Cys Asp Leu Gly Ala Ser Gly Leu Thr Pro Ala					
	275		280		285
Ser Gly Gly Ser Asp Gln Ser Phe Pro Asp Leu Gln Val Thr Gly Leu					
	290		295		300
Tyr Thr Ala Tyr Ser Thr Pro Asp Ser Val Ala Ala Ser Gly Thr Ser					
305		310		315	320
Ser Ser Ser Gln Tyr Leu Gly Ala Gln Gly Asn Lys Pro Ile Ala Leu					
	325		330		335
Leu					

<210> 4784

<211> 594

<212> PRT

<213> Homo sapiens

<400> 4784

Met Glu Cys Tyr Tyr Ile Val Ile Ser Ser Thr His Leu Ser Asn Gly			
1	5	10	15
His Phe Arg Asn Ile Lys Gly Val Phe Arg Gly Pro Leu Ser Lys Asn			
20	25	30	
Gly Asn Lys Thr Leu Asp Tyr Ala Glu Lys Glu Asn Thr Ile Ala Lys			
35	40	45	
Ala Leu Glu Asp Leu Lys Ala Asn Phe Tyr Cys Glu Leu Cys Asp Lys			
50	55	60	
Gln Tyr Tyr Lys His Gln Glu Phe Asp Asn His Ile Asn Ser Tyr Asp			
65	70	75	80
His Ala His Lys Gln Arg Leu Lys Glu Leu Lys Gln Arg Glu Phe Ala			
85	90	95	
Arg Asn Val Ala Ser Lys Ser Arg Lys Asp Glu Arg Lys Gln Glu Lys			
100	105	110	
Ala Leu Gln Arg Leu His Lys Leu Ala Glu Leu Arg Lys Glu Thr Val			

115	120	125
Cys Ala Pro Gly Ser Gly Pro Met Phe Lys Ser Thr Thr Val Thr Val		
130	135	140
Arg Glu Asn Cys Asn Glu Ile Ser Gln Arg Val Val Val Asp Ser Val		
145	150	155
Asn Asn Gln Gln Asp Phe Lys Tyr Thr Leu Ile His Ser Glu Glu Asn		
165	170	175
Thr Lys Asp Ala Thr Thr Val Ala Glu Asp Pro Glu Ser Ala Asn Asn		
180	185	190
Tyr Thr Ala Lys Asn Asn Gln Val Gly Asp Gln Ala Gln Gly Ile His		
195	200	205
Arg His Lys Ile Gly Phe Ser Phe Ala Phe Pro Lys Lys Ala Ser Val		
210	215	220
Lys Leu Glu Ser Ser Ala Ala Ala Phe Ser Glu Tyr Ser Asp Asp Ala		
225	230	235
Ser Val Gly Lys Gly Phe Ser Arg Lys Ser Arg Phe Val Pro Ser Ala		
245	250	255
Cys His Leu Gln Leu Ser Ser Pro Thr Asp Val Leu Leu Ser Ser Glu		
260	265	270
Glu Lys Thr Asn Ser Phe His Pro Pro Glu Ala Met Cys Arg Asp Lys		
275	280	285
Glu Thr Val Gln Thr Gln Glu Ile Lys Glu Val Ser Ser Glu Lys Asp		
290	295	300
Ala Leu Leu Leu Pro Ser Phe Cys Lys Phe Gln Leu Gln Leu Ser Ser		
305	310	315
Asp Ala Asp Asn Cys Gln Asn Ser Val Pro Leu Ala Asp Gln Ile Pro		
325	330	335
Leu Glu Ser Val Val Ile Asn Glu Asp Ile Pro Val Ser Gly Asn Ser		
340	345	350
Phe Glu Leu Leu Gly Asn Lys Ser Thr Val Leu Asp Met Ser Asn Asp		
355	360	365
Cys Ile Ser Val Gln Ala Thr Thr Glu Glu Asn Val Lys His Asn Glu		
370	375	380
Ala Ser Thr Thr Glu Val Glu Asn Lys Asn Gly Pro Glu Thr Leu Ala		
385	390	395
Pro Ser Asn Thr Glu Glu Val Asn Ile Thr Ile His Lys Lys Thr Asn		

405	410	415
Phe Cys Lys Arg Gln Cys Glu Pro Phe Val Pro Val Leu Asn Lys His		
420	425	430
Arg Ser Thr Val Leu Gln Trp Pro Ser Glu Met Leu Val Tyr Thr Thr		
435	440	445
Thr Lys Pro Ser Ile Ser Tyr Ser Cys Asn Pro Leu Cys Phe Asp Phe		
450	455	460
Lys Ser Thr Lys Val Asn Asn Asn Leu Asp Lys Asn Lys Pro Asp Leu		
465	470	475
Lys Asp Leu Cys Ser Gln Gln Lys Gln Glu Asp Ile Cys Met Gly Pro		
485	490	495
Leu Ser Asp Tyr Lys Asp Val Ser Thr Glu Gly Leu Thr Asp Tyr Glu		
500	505	510
Ile Gly Ser Ser Lys Asn Lys Cys Ser Gln Val Thr Pro Leu Leu Ala		
515	520	525
Asp Asp Ile Leu Ser Ser Ser Cys Asp Ser Gly Lys Asn Lys Asn Thr		
530	535	540
Gly Gln Arg Tyr Lys Asn Ile Ser Cys Lys Ile Arg Glu Thr Glu Lys		
545	550	555
Tyr Asn Phe Thr Lys Ser Gln Ile Lys Gln Asp Thr Leu Asp Glu Lys		
565	570	575
Tyr Asn Lys Ile Arg Leu Lys Glu Thr His Glu Tyr Trp Phe His Lys		
580	585	590
Ser Arg		

<210> 4785

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4785

Met Ile Thr Phe Tyr Phe Leu Phe Leu Phe Ser Phe Leu Ser Phe Phe
1 5 10 15
Phe Phe Phe Phe Phe Glu Thr Glu Phe Cys Ser Ser Cys Pro Gly Trp

20 25 30
 Ser Asn Gly Thr Ile Leu Ala His Arg Asn Leu His Leu Pro Gly Ser
 35 40 45
 Ser Asp Ser Pro Pro Ser Ala Phe Pro Ser Ser Trp Asp Tyr Arg His
 50 55 60
 Ala Pro Pro Ser Pro Ala Asn Phe Val Phe Leu Val Asp Met Gly Leu
 65 70 75 80
 Leu His Val Gly Gln Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Pro
 85 90 95
 Pro Thr Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys
 100 105 110
 Ala Arg Pro Leu Phe Ser
 115

<210> 4786

<211> 491

<212> PRT

<213> Homo sapiens

<400> 4786

Met Ala Tyr Leu Tyr Ser Ser Asp Ala Phe Leu Glu Gly Tyr Val Gln
 1 5 10 15
 Gln Phe Leu Tyr Thr Phe Arg Tyr Phe Cys Thr Pro His Asp Phe Leu
 20 25 30
 His Phe Leu Leu Asp Arg Ile Asn Ser Thr Leu Thr Arg Ala His Gln
 35 40 45
 Asp Pro Thr Ser Thr Phe Thr Lys Ile Tyr Arg Arg Ser Leu Cys Val
 50 55 60
 Leu Gln Ala Trp Val Glu Asp Cys Tyr Ala Val Asp Phe Pro Arg Asn
 65 70 75 80
 Ser Gly Leu Leu Gly Lys Leu Glu Asp Phe Ile Ser Ser Lys Ile Leu
 85 90 95
 Pro Leu Asp Gly Ser Ala Lys His Leu Leu Gly Leu Leu Glu Val Gly
 100 105 110
 Met Asp Arg Arg Ala Glu Gly Asn Pro Arg Gly Thr Asp Leu Glu Asn

115	120	125
Pro Arg Glu Ala Glu Glu Asp Ala Arg Pro Phe Asn Ala Leu Cys Lys		
130	135	140
Arg Leu Ser Glu Asp Gly Ile Ser Arg Lys Ser Phe Pro Trp Arg Leu		
145	150	155
Pro Arg Gly Asn Gly Leu Val Leu Pro Pro His Lys Glu Arg Pro Tyr		
165	170	175
Thr Ile Ala Ala Ala Leu Pro Lys Pro Cys Phe Leu Glu Asp Phe Tyr		
180	185	190
Gly Pro Cys Ala Lys Thr Ser Glu Lys Gly Pro Tyr Phe Leu Thr Glu		
195	200	205
Tyr Ser Thr His Gln Leu Phe Ser Gln Leu Thr Leu Leu Gln Gln Glu		
210	215	220
Leu Phe Gln Lys Cys His Pro Val His Phe Leu Asn Ser Arg Ala Leu		
225	230	235
Gly Val Met Asp Lys Ser Thr Ala Ile Pro Lys Ala Ser Ser Ser Glu		
245	250	255
Ser Leu Ser Ala Lys Thr Cys Ser Leu Phe Leu Pro Asn Tyr Val Gln		
260	265	270
Asp Lys Tyr Leu Leu Gln Leu Leu Arg Asn Ala Asp Asp Val Ser Thr		
275	280	285
Trp Val Ala Ala Glu Ile Val Thr Ser His Thr Ser Lys Leu Gln Val		
290	295	300
Asn Leu Leu Ser Lys Phe Leu Leu Ile Ala Lys Ser Cys Tyr Glu Gln		
305	310	315
Arg Asn Phe Ala Thr Ala Met Gln Ile Leu Ser Gly Leu Glu His Leu		
325	330	335
Ala Val Arg Gln Ser Pro Ala Trp Arg Ile Leu Pro Ala Lys Ile Ala		
340	345	350
Glu Val Met Glu Glu Leu Lys Ala Val Glu Val Phe Leu Lys Ser Asp		
355	360	365
Ser Leu Cys Leu Met Glu Gly Arg Arg Phe Arg Ala Gln Pro Thr Leu		
370	375	380
Pro Ser Ala His Leu Leu Ala Met His Ile Gln Gln Leu Glu Thr Gly		
385	390	395
Gly Phe Thr Met Thr Asn Gly Ala His Arg Trp Ser Lys Leu Arg Asn		400

	405		410		415										
Ile	Ala	Lys	Val	Val	Ser	Gln	Val	His	Ala	Phe	Gln	Glu	Asn	Pro	Tyr
	420		425		430										
Thr	Phe	Ser	Pro	Asp	Pro	Lys	Leu	Gln	Ser	Tyr	Leu	Lys	Gln	Arg	Ile
	435		440		445										
Ala	Arg	Phe	Ser	Gly	Ala	Asp	Ile	Ser	Thr	Leu	Ala	Ala	Asp	Ser	Arg
	450		455		460										
Ala	Asn	Phe	His	Gln	Val	Ser	Ser	Glu	Lys	His	Ser	Arg	Lys	Ile	Gln
	465		470		475									480	
Asp	Lys	Leu	Arg	Arg	Met	Lys	Ala	Thr	Phe	Gln					
		485		490											

<210> 4787

<211> 415

<212> PRT

<213> Homo sapiens

<400> 4787

Met	Val	Ala	Tyr	Ser	Val	Gln	Val	Leu	Ala	Val	Phe	Ile	Ser	Cys	Ala
1			5					10					15		
Ile	Leu	Thr	Leu	Ala	Met	Lys	Ile	Ala	Trp	Ile	Phe	Gly	Leu	Asn	Ser
	20						25					30			
Val	Gln	Asn	Ile	Thr	Ala	Asn	Leu	Ser	Val	Asp	Gly	Ser	Thr	Ser	Gly
	35						40					45			
Asn	Pro	Ile	Gln	Lys	Trp	Lys	Arg	Lys	Ile	Asp	Ala	Asn	Cys	Thr	Ala
	50					55				60					
Arg	Leu	Arg	Thr	Leu	Asn	Phe	Phe	Phe	Ala	Met	Ser	Gly	Lys	Val	Lys
	65			70				75					80		
Asp	Gly	Thr	Pro	Cys	Ser	Pro	Asn	Lys	Asn	Asp	Val	Cys	Ile	Asp	Gly
		85					90					95			
Val	Cys	Glu	Leu	Val	Gly	Cys	Asp	His	Glu	Leu	Gly	Ser	Lys	Ala	Val
	100						105					110			
Ser	Asp	Ala	Cys	Gly	Val	Cys	Lys	Gly	Asp	Asn	Ser	Thr	Cys	Lys	Phe
	115						120					125			
Tyr	Lys	Gly	Leu	Tyr	Leu	Asn	Gln	His	Lys	Ala	Asn	Glu	Tyr	Tyr	Pro

130	135	140
Val Val Leu Ile Pro Ala Gly Ala Arg Ser Ile Glu Ile Gln Glu Leu		
145	150	155
Gln Val Ser Ser Ser Tyr Leu Ala Val Arg Ser Leu Ser Gln Lys His		160
	165	170
		175
Tyr Leu Thr Gly Gly Trp Ser Ile Asp Trp Pro Gly Glu Phe Pro Phe		
	180	185
		190
Ala Gly Thr Thr Phe Glu Tyr Gln Arg Ser Phe Asn Arg Pro Glu Arg		
	195	200
		205
Leu Tyr Ala Pro Gly Pro Thr Asn Glu Thr Leu Val Phe Glu Ile Leu		
	210	215
		220
Met Gln Gly Lys Asn Pro Gly Ile Ala Trp Lys Tyr Ala Leu Pro Lys		
225	230	235
		240
Val Met Asn Gly Thr Pro Pro Ala Thr Lys Arg Pro Ala Tyr Thr Trp		
	245	250
		255
Ser Ile Val Gln Ser Glu Cys Ser Val Ser Cys Gly Gly Gly Tyr Ile		
	260	265
		270
Asn Val Lys Ala Ile Cys Leu Arg Asp Gln Asn Thr Gln Val Asn Ser		
	275	280
		285
Ser Phe Cys Ser Ala Lys Thr Lys Pro Val Thr Glu Pro Lys Ile Cys		
	290	295
		300
Asn Arg Arg Ala Cys Pro Ala His Pro Val Tyr Asn Met Val Ala Gly		
305	310	315
		320
Trp Tyr Ser Leu Pro Trp Gln Gln Cys Thr Val Thr Cys Gly Gly Gly		
	325	330
		335
Val Gln Thr Arg Ser Val His Cys Val Gln Gln Gly Arg Pro Ser Ser		
	340	345
		350
Ser Cys Leu Leu His Gln Lys Pro Pro Val Leu Arg Ala Cys Asn Thr		
	355	360
		365
Asn Phe Cys Pro Ala Pro Glu Lys Arg Glu Asp Pro Ser Cys Val Asp		
370	375	380
Phe Phe Asn Trp Cys His Leu Val Pro Gln His Gly Val Cys Asn His		
385	390	395
		400
Lys Phe Tyr Gly Lys Gln Cys Cys Lys Ser Cys Thr Arg Lys Ile		
	405	410
		415

<210> 4788

<211> 974

<212> PRT

<213> Homo sapiens.

<400> 4788

Met Arg Arg Ala Gly Ile Gly Glu Asp Ser Arg Leu Gly Leu Gln Ala
 1 5 10 15
 Gln Pro Gly Ala Glu Pro Ser Pro Gly Arg Ala Gly Thr Glu Arg Ser
 20 25 30
 Leu Gly Gly Ala Gln Gly Pro Gly Gln Pro Cys Ser Cys Pro Gly Ala
 35 40 45
 Met Ala Ser Ala Val Arg Gly Ser Arg Pro Trp Pro Arg Leu Gly Leu
 50 55 60
 Gln Leu Gln Phe Ala Ala Leu Leu Leu Gly Thr Leu Ser Pro Gln Val
 65 70 75 80
 His Thr Leu Arg Pro Glu Asn Leu Leu Leu Val Ser Thr Leu Asp Gly
 85 90 95
 Ser Leu His Ala Leu Ser Lys Gln Thr Gly Asp Leu Lys Trp Thr Leu
 100 105 110
 Arg Asp Asp Pro Val Ile Glu Gly Pro Met Tyr Val Thr Glu Met Ala
 115 120 125
 Phe Leu Ser Asp Pro Ala Asp Gly Ser Leu Tyr Ile Leu Gly Thr Gln
 130 135 140
 Lys Gln Gln Gly Leu Met Lys Leu Pro Phe Thr Ile Pro Glu Leu Val
 145 150 155 160
 His Ala Ser Pro Cys Arg Ser Ser Asp Gly Val Phe Tyr Thr Gly Arg
 165 170 175
 Lys Gln Asp Ala Trp Phe Val Val Asp Pro Glu Ser Gly Glu Thr Gln
 180 185 190
 Met Thr Leu Thr Thr Glu Gly Pro Ser Thr Pro Arg Leu Tyr Ile Gly
 195 200 205
 Arg Thr Gln Tyr Thr Val Thr Met His Asp Pro Arg Ala Pro Ala Leu
 210 215 220

Arg Trp Asn Thr Thr Tyr Arg Arg Tyr Ser Ala Pro Pro Met Asp Gly
 225 230 235 240
 Ser Pro Gly Lys Tyr Met Ser His Leu Ala Ser Cys Gly Met Gly Leu
 245 250 255
 Leu Leu Thr Val Asp Pro Gly Ser Gly Thr Val Leu Trp Thr Gln Asp
 260 265 270
 Leu Gly Val Pro Val Met Gly Val Tyr Thr Trp His Gln Asp Gly Leu
 275 280 285
 Arg Gln Leu Pro His Leu Thr Leu Ala Arg Asp Thr Leu His Phe Leu
 290 295 300
 Ala Leu Arg Trp Gly His Ile Arg Leu Pro Ala Ser Gly Pro Arg Asp
 305 310 315 320
 Thr Ala Thr Leu Phe Ser Thr Leu Asp Thr Gln Leu Leu Met Thr Leu
 325 330 335
 Tyr Val Gly Lys Asp Glu Thr Gly Phe Tyr Val Ser Lys Ala Leu Val
 340 345 350
 His Thr Gly Val Ala Leu Val Pro Arg Gly Leu Thr Leu Ala Pro Ala
 355 360 365
 Asp Gly Pro Thr Thr Asp Glu Val Thr Leu Gln Val Ser Gly Glu Arg
 370 375 380
 Glu Gly Ser Pro Ser Thr Ala Val Arg Tyr Pro Ser Gly Ser Val Ala
 385 390 395 400
 Leu Pro Ser Gln Trp Leu Leu Ile Gly His His Glu Leu Pro Pro Val
 405 410 415
 Leu His Thr Thr Met Leu Arg Val His Pro Thr Leu Gly Ser Gly Thr
 420 425 430
 Ala Glu Thr Arg Pro Pro Glu Asn Thr Gln Ala Pro Ala Phe Phe Leu
 435 440 445
 Glu Leu Leu Ser Leu Ser Arg Glu Lys Leu Trp Asp Ser Glu Leu His
 450 455 460
 Pro Glu Glu Lys Thr Pro Asp Ser Tyr Leu Gly Leu Gly Pro Gln Asp
 465 470 475 480
 Leu Leu Ala Ala Ser Leu Thr Ala Val Leu Leu Gly Gly Trp Ile Leu
 485 490 495
 Phe Val Met Arg Gln Gln Gln Pro Gln Val Val Glu Lys Gln Gln Glu
 500 505 510

Thr Pro Leu Ala Pro Ala Asp Phe Ala His Ile Ser Gln Asp Ala Gln
 515 520 525
 Ser Leu His Ser Gly Ala Ser Arg Arg Ser Gln Lys Arg Leu Gln Ser
 530 535 540
 Pro Ser Lys Gln Ala Gln Pro Leu Asp Asp Pro Glu Ala Glu Gln Leu
 545 550 555 560
 Thr Val Val Gly Lys Ile Ser Phe Asn Pro Lys Asp Val Leu Gly Arg
 565 570 575
 Gly Ala Gly Gly Thr Phe Val Phe Arg Gly Gln Phe Glu Gly Arg Ala
 580 585 590
 Val Ala Val Lys Arg Leu Leu Arg Glu Cys Phe Gly Leu Val Arg Arg
 595 600 605
 Glu Val Gln Leu Leu Gln Glu Ser Asp Arg His Pro Asn Val Leu Arg
 610 615 620
 Tyr Phe Cys Thr Glu Arg Gly Pro Gln Phe His Tyr Ile Ala Leu Glu
 625 630 635 640
 Leu Cys Arg Ala Ser Leu Gln Glu Tyr Val Glu Asn Pro Asp Leu Asp
 645 650 655
 Arg Gly Gly Leu Glu Pro Glu Val Val Leu Gln Gln Leu Met Ser Gly
 660 665 670
 Leu Ala His Leu His Ser Leu His Ile Val His Arg Asp Leu Lys Pro
 675 680 685
 Gly Asn Ile Leu Ile Thr Gly Pro Asp Ser Gln Gly Leu Gly Arg Val
 690 695 700
 Val Leu Ser Asp Phe Gly Leu Cys Lys Lys Leu Pro Ala Gly Arg Cys
 705 710 715 720
 Ser Phe Ser Leu His Ser Gly Ile Pro Gly Thr Glu Gly Trp Met Ala
 725 730 735
 Pro Glu Leu Leu Gln Leu Leu Pro Pro Asp Ser Pro Thr Ser Ala Val
 740 745 750
 Asp Ile Phe Ser Ala Gly Cys Val Phe Tyr Tyr Val Leu Ser Gly Gly
 755 760 765
 Ser His Pro Phe Gly Asp Ser Leu Tyr Arg Gln Ala Asn Ile Leu Thr
 770 775 780
 Gly Ala Pro Cys Leu Ala His Leu Glu Glu Glu Val His Asp Lys Val
 785 790 795 800

Val Ala Arg Asp Leu Val Gly Ala Met Leu Ser Pro Leu Pro Gln Pro
 805 810 815
 Arg Pro Ser Ala Pro Gln Val Leu Ala His Pro Phe Phe Trp Ser Arg
 820 825 830
 Ala Lys Gln Leu Gln Phe Phe Gln Asp Val Ser Asp Trp Leu Glu Lys
 835 840 845
 Glu Ser Glu Gln Glu Pro Leu Val Arg Ala Leu Glu Ala Gly Gly Cys
 850 855 860
 Ala Val Val Arg Asp Asn Trp His Glu His Ile Ser Met Pro Leu Gln
 865 870 875 880
 Thr Asp Leu Arg Lys Phe Arg Ser Tyr Lys Gly Thr Ser Val Arg Asp
 885 890 895
 Leu Leu Arg Ala Val Arg Asn Lys Lys His His Tyr Arg Glu Leu Pro
 900 905 910
 Val Glu Val Arg Gln Ala Leu Gly Gln Val Pro Asp Gly Phe Val Gln
 915 920 925
 Tyr Phe Thr Asn Arg Phe Pro Arg Leu Leu Leu His Thr His Arg Ala
 930 935 940
 Met Arg Ser Cys Ala Ser Glu Ser Leu Phe Leu Pro Tyr Tyr Pro Pro
 945 950 955 960
 Asp Ser Glu Ala Arg Arg Pro Cys Pro Gly Ala Thr Gly Arg
 965 970

<210> 4789

<211> 794

<212> PRT

<213> Homo sapiens

<400> 4789

Met Glu Gly Ser Leu Ala Gly Ser Leu Ala Ala Pro Asp Arg Pro Gln
 1 5 10 15
 Gly Pro Glu Arg Leu Pro Gly Pro Ala Pro Arg Glu Asn Ile Glu Gly
 20 25 30
 Gly Ala Glu Ala Ala Glu Gly Glu Gly Ile Phe Arg Ser Thr Arg
 35 40 45

Tyr Leu Pro Val Thr Lys Glu Gly Pro Arg Asp Ile Leu Asp Gly Arg

50	55	60	
Gly Gly Ile Ser Val Ala Asn Phe Asp Pro Gly Thr Phe Ser Leu Met			
65	70	75	80
Arg Cys Asp Phe Cys Gly Ala Gly Phe Asp Thr Arg Ala Gly Leu Ser			
85	90	95	
Ser His Ala Arg Ala His Leu Arg Asp Phe Gly Ile Thr Asn Trp Glu			
100	105	110	
Leu Thr Val Ser Pro Ile Asn Ile Leu Gln Glu Leu Leu Ala Thr Ser			
115	120	125	
Ala Ala Glu Gln Pro Pro Ser Pro Leu Gly Arg Glu Pro Gly Gly Pro			
130	135	140	
Pro Gly Ser Phe Leu Thr Ser Arg Arg Pro Arg Leu Pro Leu Thr Val			
145	150	155	160
Pro Phe Pro Pro Thr Trp Ala Glu Asp Pro Gly Pro Ala Tyr Gly Asp			
165	170	175	
Ala Ser Gly Pro Glu Pro Ala Arg Asp Ile Arg Cys Glu Phe Cys Gly			
180	185	190	
Glu Phe Phe Glu Asn Arg Lys Gly Leu Ser Ser His Ala Arg Ser His			
195	200	205	
Leu Arg Gln Met Gly Val Thr Glu Trp Tyr Val Asn Gly Ser Pro Ile			
210	215	220	
Asp Thr Leu Arg Glu Ile Leu Lys Arg Arg Thr Gln Ser Arg Pro Gly			
225	230	235	240
Gly Pro Pro Asn Pro Pro Gly Pro Ser Pro Lys Ala Leu Ala Lys Met			
245	250	255	
Met Gly Gly Ala Gly Pro Gly Ser Ser Leu Glu Ala Arg Ser Pro Ser			
260	265	270	
Asp Leu His Ile Ser Pro Leu Ala Lys Lys Leu Pro Pro Pro Pro Gly			
275	280	285	
Ser Pro Leu Gly His Ser Pro Thr Ala Ser Pro Pro Pro Thr Ala Arg			
290	295	300	
Lys Met Phe Pro Gly Leu Ala Ala Pro Ser Leu Pro Lys Lys Leu Lys			
305	310	315	320
Pro Glu Gln Ile Arg Val Glu Ile Lys Arg Glu Met Leu Pro Gly Ala			

325	330	335
Leu His Gly Glu Leu His Pro Ser Glu Gly Pro Trp Gly Ala Pro Arg		
340	345	350
Glu Asp Met Thr Pro Leu Asn Leu Ser Ser Arg Ala Glu Pro Val Arg		
355	360	365
Asp Ile Arg Cys Glu Phe Cys Gly Glu Phe Phe Glu Asn Arg Lys Gly		
370	375	380
Leu Ser Ser His Ala Arg Ser His Leu Arg Gln Met Gly Val Thr Glu		
385	390	395
Trp Ser Val Asn Gly Ser Pro Ile Asp Thr Leu Arg Glu Ile Leu Lys		
405	410	415
Lys Lys Ser Lys Pro Cys Leu Ile Lys Lys Glu Pro Pro Ala Gly Asp		
420	425	430
Leu Ala Pro Ala Leu Ala Glu Asp Gly Pro Pro Thr Val Ala Pro Gly		
435	440	445
Pro Val Gln Ser Pro Leu Pro Leu Ser Pro Leu Ala Gly Arg Pro Gly		
450	455	460
Lys Pro Gly Ala Gly Pro Ala Gln Val Pro Arg Glu Leu Ser Leu Thr		
465	470	475
Pro Ile Thr Gly Ala Lys Pro Ser Ala Thr Gly Tyr Leu Gly Ser Val		
485	490	495
Ala Ala Lys Arg Pro Leu Gln Glu Asp Arg Leu Leu Pro Ala Glu Val		
500	505	510
Lys Ala Lys Ala Tyr Ile Gln Thr Glu Leu Pro Phe Lys Ala Lys Thr		
515	520	525
Leu His Glu Lys Thr Ser His Ser Ser Thr Glu Ala Cys Cys Glu Leu		
530	535	540
Cys Gly Leu Tyr Phe Glu Asn Arg Lys Ala Leu Ala Ser His Ala Arg		
545	550	555
Ala His Leu Arg Gln Phe Gly Val Thr Glu Trp Cys Val Asn Gly Ser		
565	570	575
Pro Ile Glu Thr Leu Ser Glu Trp Ile Lys His Arg Pro Gln Lys Val		
580	585	590
Gly Ala Tyr Arg Ser Tyr Ile Gln Gly Gly Arg Pro Phe Thr Lys Lys		
595	600	605
Phe Arg Ser Ala Gly His Gly Arg Asp Ser Asp Lys Arg Pro Ser Leu		

610	615	620	
Gly Leu Ala Pro Gly Gly Leu Ala Val Val Gly Arg Ser Ala Gly Gly			
625	630	635	640
Glu Pro Gly Pro Glu Ala Gly Arg Ala Ala Asp Gly Gly Glu Arg Pro			
	645	650	655
Leu Ala Ala Ser Pro Pro Gly Thr Val Lys Ala Glu Glu His Gln Arg			
	660	665	670
Gln Asn Ile Asn Lys Phe Glu Arg Arg Gln Ala Arg Pro Pro Asp Ala			
	675	680	685
Ser Ala Ala Arg Gly Gly Glu Asp Thr Asn Asp Leu Gln Gln Lys Leu			
	690	695	700
Glu Glu Val Arg Gln Pro Pro Pro Arg Val Arg Pro Val Pro Ser Leu			
705	710	715	720
Val Pro Arg Pro Pro Gln Thr Ser Leu Val Lys Phe Val Gly Asn Ile			
	725	730	735
Tyr Thr Leu Lys Cys Arg Phe Cys Glu Val Glu Phe Gln Gly Pro Leu			
	740	745	750
Ser Ile Gln Glu Glu Trp Val Arg His Leu Gln Arg His Ile Leu Glu			
	755	760	765
Met Asn Phe Ser Lys Ala Asp Pro Pro Pro Glu Glu Ser Gln Ala Pro			
	770	775	780
Gln Ala Gln Thr Ala Ala Ala Glu Ala Pro			
785	790		

<210> 4790

<211> 692

<212> PRT

<213> Homo sapiens

<400> 4790

Met Lys Glu Phe Leu Ser Thr Ala Gln Gly Asn Arg Glu Val Phe His			
1	5	10	15
Ala Gly Thr Leu Gln Ile His Glu Ser His His Asn Gly Asp Phe Cys			
	20	25	30
Tyr Gln Asp Val Asp Lys Asp Ile His Asp Tyr Glu Phe Gln Trp Gln			

35	40	45
Glu Asp Glu Arg Asn Gly His Glu Ala Pro Met Thr Lys Ile Lys Lys		
50	55	60
Leu Thr Gly Ser Thr Glu Arg Tyr Asp Gln Ser His Ala Arg Asn Lys		
65	70	75
Pro Ile Lys Asp Gln Leu Gly Ser Ser Phe His Ser His Leu Pro Glu		
85	90	95
Met His Ile Phe Gln Thr Glu Glu Lys Ile Asp Asn Gln Val Val Lys		
100	105	110
Ser Ile His Asp Ala Ser Leu Val Ser Thr Ala Gln Arg Ile Ser Cys		
115	120	125
Arg Pro Lys Thr His Ile Ser Asn Asn His Gly Asn Asn Phe Trp Asn		
130	135	140
Ser Ser Leu Leu Thr Gln Lys Gln Glu Val His Met Arg Glu Lys Ser		
145	150	155
Phe Gln Cys Asn Glu Ser Gly Lys Ala Phe Asn Tyr Ser Ser Leu Leu		
165	170	175
Arg Lys His Gln Ile Ile His Leu Ala Asp Lys Tyr Lys Cys Asp Val		
180	185	190
Cys Gly Lys Leu Phe Asn Gln Lys Arg Asn Leu Ala Cys His Arg Arg		
195	200	205
Cys His Thr Gly Glu Asn Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr		
210	215	220
Phe Ser Gln Thr Ser Ser Leu Thr Cys His Arg Arg Leu His Thr Gly		
225	230	235
Glu Lys Pro Tyr Lys Cys Glu Glu Cys Asp Lys Ala Phe His Phe Lys		
245	250	255
Ser Ile Leu Glu Arg His Ser Ile Ile His Thr Glu Glu Lys Pro Tyr		
260	265	270
Lys Cys Asn Glu Cys Gly Lys Thr Phe Arg Gln Lys Ser Ile Leu Thr		
275	280	285
Arg His His Arg Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu		
290	295	300
Cys Gly Lys Thr Phe Ser His Lys Ser Ser Leu Thr Cys His His Arg		
305	310	315
Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr		

325	330	335
Phe Ser His Lys Ser Ser Leu Thr Cys His Arg Arg Leu His Thr Gly		
340	345	350
Glu Lys Pro Tyr Lys Cys Glu Glu Cys Asp Lys Ala Tyr Ser Phe Arg		
355	360	365
Ser Asn Phe Glu Ile His Arg Lys Ile His Thr Glu Asp Asn Ala Tyr		
370	375	380
Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser Arg Thr Ser Ser Leu Thr		
385	390	395
Cys His Arg Arg Arg His Thr Gly Glu Gln Pro Tyr Lys Cys Glu Glu		
405	410	415
Cys Asp Lys Ala Phe Arg Phe Lys Ser Asn Leu Glu Arg His Arg Arg		
420	425	430
Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr		
435	440	445
Phe Ser Arg Lys Ser Tyr Leu Thr Cys His His Arg Leu His Thr Gly		
450	455	460
Glu Lys Ala Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser Trp Lys		
465	470	475
Ser Ser Leu Thr Cys His Arg Arg Leu His Ser Gly Glu Lys Pro Tyr		
485	490	495
Lys Cys Lys Glu Cys Gly Lys Thr Phe Asn Gln Gln Leu Thr Leu Lys		
500	505	510
Arg His Arg Arg Leu His Ser Gly Glu Asn Pro Tyr Lys Cys Glu Asp		
515	520	525
Ser Asp Lys Ala Tyr Ser Phe Lys Ser Asn Leu Glu Ile His Gln Lys		
530	535	540
Ile His Thr Glu Glu Asn Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr		
545	550	555
Phe Ser Arg Thr Ser Ser Leu Thr Cys His Arg Arg Leu His Thr Gly		
565	570	575
Glu Lys Pro Tyr Lys Cys Glu Glu Cys Asp Lys Ala Phe Arg Val Lys		
580	585	590
Ser Asn Leu Glu Gly His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr		
595	600	605
Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser Arg Lys Ser Tyr Phe Ile		

610	615	620
Cys His His Arg Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu		
625	630	635
Cys Gly Lys Asn Phe Ser Gln Lys Ser Ser Leu Ile Cys His His Arg		
645	650	655
Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr		
660	665	670
Phe Ser Gln Lys Ser Asn Leu Thr Cys His Arg Arg Leu His Thr Gly		
675	680	685
Glu Lys Gln Val		
690		

<210> 4791

<211> 872

<212> PRT

<213> Homo sapiens

<400> 4791

Met Gly Ile Val Trp Ile Leu Met Ser Val Leu Pro Trp Trp Gly Arg		
1	5	10
Cys Ala Asp Leu Ala Ile Ala Ser Thr Gln Leu Val Pro Ser Thr Ala		
20	25	30
Ser Ala Arg Met Ala Leu Ser Ser Gln Leu Met Gly Arg Thr Val Trp		
35	40	45
Thr Pro Met Ser Ala Ser Ala Leu Gln Glu Pro Ala Tyr Gln Ala Leu		
50	55	60
Ala Arg Thr Ser Arg Ala Pro Ser Ala Ala Ser Val Pro Met Ala Ser		
65	70	75
Arg Cys Arg Val Thr Thr Ala Leu Ile Ser Thr Ser Ala Gln Arg Ser		
85	90	95
Pro Thr Ser Ala Ser Leu Ala Pro Val Pro Thr Ala Leu Gly Ala Ser		
100	105	110
Ser Ala Ser Ala His Leu Ala Leu Ser Ser Leu Thr Met Gly Thr Val		
115	120	125
Ala Leu Thr His Gly Arg Val Ser Ala Ser Pro Val Leu Arg Leu Gly		

130	135	140	
Ser Ala Arg Cys Pro Lys Leu Ser Thr Pro Pro Arg Pro Ala Ala Ala			
145	150	155	160
Ala Val Arg Gly Leu Gly Arg Ala Gly Glu Thr Pro Ala Asn Cys Val			
	165	170	175
Ser Arg Arg Ala Val Pro Gly Pro Asp Asp Ser Arg Glu Asp Val Asn			
	180	185	190
Glu Cys Ala Glu Asn Pro Gly Val Cys Thr Asn Gly Val Cys Val Asn			
	195	200	205
Thr Asp Gly Ser Phe Arg Cys Glu Cys Pro Phe Gly Tyr Ser Leu Asp			
210	215	220	
Phe Thr Gly Ile Asn Cys Val Asp Thr Asp Glu Cys Ser Val Gly His			
225	230	235	240
Pro Cys Gly Gln Gly Thr Cys Thr Asn Val Ile Gly Gly Phe Glu Cys			
	245	250	255
Ala Cys Ala Asp Gly Phe Glu Pro Gly Leu Met Met Thr Cys Glu Asp			
	260	265	270
Ile Asp Glu Cys Ser Leu Asn Pro Leu Leu Cys Ala Phe Arg Cys His			
275	280	285	
Asn Thr Glu Gly Ser Tyr Leu Cys Thr Cys Pro Ala Gly Tyr Thr Leu			
290	295	300	
Arg Glu Asp Gly Ala Met Cys Arg Asp Val Asp Glu Cys Ala Asp Gly			
305	310	315	320
Gln Gln Asp Cys His Ala Arg Gly Met Glu Cys Lys Asn Leu Ile Gly			
	325	330	335
Thr Phe Ala Cys Val Cys Pro Pro Gly Met Arg Pro Leu Pro Gly Ser			
	340	345	350
Gly Glu Gly Cys Thr Asp Asp Asn Glu Cys His Ala Gln Pro Asp Leu			
	355	360	365
Cys Val Asn Gly Arg Cys Val Asn Thr Ala Gly Ser Phe Arg Cys Asp			
370	375	380	
Cys Asp Glu Gly Phe Gln Pro Ser Pro Thr Leu Thr Glu Cys His Asp			
385	390	395	400
Ile Arg Gln Gly Pro Cys Phe Ala Glu Val Leu Gln Thr Met Cys Arg			
	405	410	415
Ser Leu Ser Ser Ser Ser Glu Ala Val Thr Arg Ala Glu Cys Cys Cys			

420	425	430
Gly Gly Gly Arg Gly Trp Gly Pro Arg Cys Glu Leu Cys Pro Leu Pro		
435	440	445
Gly Thr Ser Ala Tyr Arg Lys Leu Cys Pro His Gly Ser Gly Tyr Thr		
450	455	460
Ala Glu Gly Arg Asp Val Asp Glu Cys Arg Met Leu Ala His Leu Cys		
465	470	475
Ala His Gly Glu Cys Ile Asn Ser Leu Gly Ser Phe Arg Cys His Cys		
485	490	495
Gln Ala Gly Tyr Thr Pro Asp Ala Thr Ala Thr Thr Cys Leu Asp Met		
500	505	510
Asp Glu Cys Ser Gln Val Pro Lys Pro Cys Thr Phe Leu Cys Lys Asn		
515	520	525
Thr Lys Gly Ser Phe Leu Cys Ser Cys Pro Arg Gly Tyr Leu Leu Glu		
530	535	540
Glu Asp Gly Arg Thr Cys Lys Asp Leu Asp Glu Cys Thr Ser Arg Gln		
545	550	555
His Asn Cys Gln Phe Leu Cys Val Asn Thr Val Gly Ala Phe Thr Cys		
565	570	575
Arg Cys Pro Pro Gly Phe Thr Gln His His Gln Ala Cys Phe Asp Val		
580	585	590
Asn Glu Cys Asp Gly Pro His Arg Cys Gln His Gly Cys Gln Asn Gln		
595	600	605
Leu Gly Gly Tyr Arg Cys Ser Cys Pro Gln Gly Phe Thr Gln His Ser		
610	615	620
Gln Trp Ala Gln Cys Val Asp Glu Asn Glu Cys Ala Leu Ser Pro Pro		
625	630	635
Thr Cys Gly Ser Ala Ser Cys Arg Asn Thr Leu Gly Gly Phe Arg Cys		
645	650	655
Val Cys Pro Ser Gly Phe Asp Phe Asp Gln Ala Leu Gly Gly Cys Gln		
660	665	670
Asp Val Asp Glu Cys Ala Gly Arg Arg Gly Pro Cys Ser Tyr Ser Cys		
675	680	685
Ala Asn Thr Pro Gly Gly Phe Leu Cys Gly Cys Pro Gln Gly Tyr Phe		
690	695	700

Arg Ala Gly Gln Gly His Cys Val Ser Gly Leu Gly Phe Ser Pro Gly
 705 710 715 720
 Pro Gln Asp Thr Pro Asp Lys Glu Glu Leu Leu Ser Ser Glu Ala Cys
 725 730 735
 Tyr Glu Cys Lys Ile Asn Gly Leu Ser Pro Arg Asp Arg Pro Arg Arg
 740 745 750
 Ser Ala His Arg Asp His Gln Val Asn Leu Ala Thr Leu Asp Ser Glu
 755 760 765
 Ala Leu Leu Thr Leu Gly Leu Asn Leu Ser His Leu Gly Arg Ala Glu
 770 775 780
 Arg Ile Leu Glu Leu Arg Pro Ala Leu Glu Gly Leu Glu Gly Arg Ile
 785 790 795 800
 Arg Tyr Val Ile Val Arg Gly Asn Glu Gln Gly Phe Phe Arg Met His
 805 810 815
 His Leu Arg Gly Val Ser Ser Leu Gln Leu Gly Arg Arg Arg Pro Gly
 820 825 830
 Pro Gly Thr Tyr Arg Leu Glu Val Val Ser His Met Ala Gly Pro Trp
 835 840 845
 Gly Val Gln Pro Glu Gly Gln Pro Gly Pro Trp Gly Gln Ala Leu Arg
 850 855 860
 Leu Lys Val Gln Leu Gln Leu Leu
 865 870

<210> 4792

<211> 1015

<212> PRT

<213> Homo sapiens

<400> 4792

Met Asp Ile Met Ser Ala Gln Ala Ser Ser Gly Ser Thr Ser Val Leu
 1 5 10 15
 Arg Trp Val Leu Ser Cys Leu Ala Thr Leu Leu Arg Lys Gln Asp Leu
 20 25 30
 Glu Ala Trp Gly Tyr Pro Val Thr Leu Gln Val Tyr His Gly Leu Leu
 35 40 45

Ser Phe Thr Val His Pro Lys Pro Lys Leu Val Thr Ala Cys Ala Met
 50 55 60
 Gln Ala Phe His Ser Leu Phe His Ala Arg Pro Gly Leu Ser Thr Leu
 65 70 75 80
 Ser Ala Glu Leu Asn Ala Gln Ile Ile Thr Ala Leu Tyr Asp Tyr Val
 85 90 95
 Pro Ser Glu Asp Asp Leu Gln Pro Leu Leu Ala Trp Leu Lys Val Met
 100 105 110
 Glu Lys Ala His Ile Asn Leu Val Arg Leu Gln Trp Asp Leu Gly Leu
 115 120 125
 Gly His Leu Pro Arg Phe Phe Gly Thr Ala Val Thr Cys Leu Leu Ser
 130 135 140
 Pro His Ser Gln Val Leu Thr Ala Ala Thr Gln Ser Leu Lys Glu Ile
 145 150 155 160

 Leu Lys Glu Cys Val Ala Pro His Met Ala Asp Ile Gly Ser Val Thr
 165 170 175
 Ser Ser Ala Ser Gly Pro Ala Gln Ser Val Ala Lys Met Phe Arg Ala
 180 185 190
 Val Glu Glu Gly Leu Thr Tyr Lys Phe His Ala Ala Trp Ser Ser Val
 195 200 205
 Leu Gln Leu Leu Cys Val Phe Phe Glu Ala Cys Gly Arg Gln Ala His
 210 215 220
 Pro Val Met Arg Lys Cys Leu Gln Ser Leu Cys Asp Leu Arg Leu Ser
 225 230 235 240
 Pro His Phe Pro His Thr Ala Ala Leu Asp Gln Ala Val Gly Ala Ala
 245 250 255
 Val Thr Ser Met Gly Pro Glu Val Val Leu Gln Ala Val Pro Leu Glu
 260 265 270
 Ile Asp Gly Ser Glu Glu Thr Leu Asp Phe Pro Arg Ser Trp Leu Leu
 275 280 285
 Pro Val Ile Arg Asp His Val Gln Glu Thr Arg Leu Gly Phe Phe Thr
 290 295 300
 Thr Tyr Phe Leu Pro Leu Ala Asn Thr Leu Lys Ser Lys Ala Met Asp
 305 310 315 320
 Leu Ala Gln Ala Gly Ser Thr Val Glu Ser Lys Ile Tyr Asp Thr Leu

	325	330	335
Gln Trp Gln Met Trp Thr Leu Leu Pro Gly Phe Cys Thr Arg Pro Thr			
	340	345	350
Asp Val Ala Ile Ser Phe Lys Gly Leu Ala Arg Thr Leu Gly Met Ala			
	355	360	365
Ile Ser Glu Arg Pro Asp Leu Arg Val Thr Val Cys Gln Val Leu Arg			
	370	375	380
Thr Leu Ile Thr Lys Gly Cys Gln Ala Glu Ala Asp Arg Ala Glu Val			
385	390	395	400
Ser Arg Phe Ala Lys Asn Phe Leu Pro Ile Leu Phe Asn Leu Tyr Gly			
	405	410	415
Gln Pro Val Ala Ala Gly Asp Thr Pro Ala Pro Arg Arg Ala Val Leu			
	420	425	430
Glu Thr Ile Arg Thr Tyr Leu Thr Ile Thr Asp Thr Gln Leu Val Asn			
	435	440	445
Ser Leu Leu Glu Lys Ala Ser Glu Lys Val Leu Asp Pro Ala Ser Ser			
	450	455	460
Asp Phe Thr Arg Leu Ser Val Leu Asp Leu Val Val Ala Leu Ala Pro			
465	470	475	480
Cys Ala Asp Glu Ala Ala Ile Ser Lys Leu Tyr Ser Thr Ile Arg Pro			
	485	490	495
Tyr Leu Glu Ser Lys Ala His Gly Val Gln Lys Lys Ala Tyr Arg Val			
	500	505	510
Leu Glu Glu Val Cys Ala Ser Pro Gln Gly Pro Gly Ala Leu Phe Val			
	515	520	525
Gln Ser His Leu Glu Asp Leu Lys Lys Thr Leu Leu Asp Ser Leu Arg			
	530	535	540
Ser Thr Ser Ser Pro Ala Lys Arg Pro Arg Leu Lys Cys Leu Leu His			
545	550	555	560
Ile Val Arg Lys Leu Ser Ala Glu His Lys Glu Phe Ile Thr Ala Leu			
	565	570	575
Ile Pro Glu Val Ile Leu Cys Thr Lys Glu Val Ser Val Gly Ala Arg			
	580	585	590
Lys Asn Ala Phe Ala Leu Leu Val Glu Met Gly His Ala Phe Leu Arg			
	595	600	605
Phe Gly Ser Asn Gln Glu Glu Ala Leu Gln Cys Tyr Leu Val Leu Ile			

610	615	620	
Tyr Pro Gly Leu Val Gly Ala Val Thr Met Val Ser Cys Ser Ile Leu			
625	630	635	640
Ala Leu Thr His Leu Leu Phe Glu Phe Lys Gly Leu Met Gly Thr Ser			
645	650	655	
Thr Val Glu Gln Leu Leu Glu Asn Val Cys Leu Leu Leu Ala Ser Arg			
660	665	670	
Thr Arg Asp Val Val Lys Ser Ala Leu Gly Phe Ile Lys Val Ala Val			
675	680	685	
Thr Val Met Asp Val Ala His Leu Ala Lys His Val Gln Leu Val Met			
690	695	700	
Glu Ala Ile Gly Lys Leu Ser Asp Asp Met Arg Arg His Phe Arg Met			
705	710	715	720
Lys Leu Arg Asn Leu Phe Thr Lys Phe Ile Arg Lys Phe Gly Phe Glu			
725	730	735	
Leu Val Lys Arg Leu Leu Pro Glu Glu Tyr His Arg Val Leu Val Asn			
740	745	750	
Ile Arg Lys Ala Glu Ala Arg Ala Lys Arg His Arg Ala Leu Ser Gln			
755	760	765	
Ala Ala Val Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Pro Ala			
770	775	780	
Gln Gly Lys Gly Asp Ser Ile Glu Glu Ile Leu Ala Asp Ser Glu Asp			
785	790	795	800
Glu Glu Asp Asn Glu Glu Glu Glu Arg Ser Arg Gly Lys Glu Gln Arg			
805	810	815	
Lys Leu Ala Arg Gln Arg Ser Arg Ala Trp Leu Lys Glu Gly Gly Gly			
820	825	830	
Asp Glu Pro Leu Asn Phe Leu Asp Pro Lys Val Ala Gln Arg Val Leu			
835	840	845	
Ala Thr Gln Pro Gly Pro Gly Arg Gly Arg Lys Lys Asp His Gly Phe			
850	855	860	
Lys Val Ser Ala Asp Gly Arg Leu Ile Ile Arg Glu Glu Ala Asp Gly			
865	870	875	880
Asn Lys Met Glu Glu Glu Glu Gly Ala Lys Gly Glu Asp Glu Glu Met			
885	890	895	
Ala Asp Pro Met Glu Asp Val Ile Ile Arg Asn Lys Lys His Gln Lys			

900	905	910
Leu Lys His Gln Lys Glu Ala Glu Glu Glu Glu Leu Glu Ile Pro Pro		
915	920	925
Gln Tyr Gln Ala Gly Gly Ser Gly Ile His Arg Pro Val Ala Lys Lys		
930	935	940
Ala Met Pro Gly Ala Glu Tyr Lys Ala Lys Lys Ala Lys Gly Asp Val		
945	950	955
Lys Lys Lys Gly Arg Pro Asp Pro Tyr Ala Tyr Ile Pro Leu Asn Arg		
965	970	975
Ser Lys Leu Asn Arg Arg Lys Lys Met Lys Leu Gln Gly Gln Phe Lys		
980	985	990
Gly Leu Val Lys Ala Ala Gln Arg Gly Ser Gln Val Gly His Lys Asn		
995	1000	1005
Arg Arg Lys Asp Arg Arg Pro		
1010	1015	

<210> 4793

<211> 445

<212> PRT

<213> Homo sapiens

<400> 4793

Met Lys Asn Pro Glu Ala Gln Gln Asp Val Ser Val Ser Gln Gly Phe
1 5 10 15
Arg Met Leu Phe Tyr Thr Met Lys Pro Ser Glu Thr Ser Phe Gln Thr
20 25 30
Leu Glu Glu Val Pro Asp Tyr Val Lys Lys Ala Thr Pro Phe Phe Ile
35 40 45
Ser Leu Met Leu Leu Glu Leu Val Val Ser Trp Ile Leu Lys Gly Lys
50 55 60
Pro Pro Gly Arg Leu Asp Asp Ala Leu Thr Ser Ile Ser Ala Gly Val
65 70 75 80
Leu Ser Arg Leu Pro Ser Leu Phe Phe Arg Ser Ile Glu Leu Thr Ser
85 90 95
Tyr Ile Tyr Ile Trp Glu Asn Tyr Arg Leu Phe Asn Leu Pro Trp Asp

100	105	110
Ser Pro Trp Thr Trp Tyr Ser Ala Phe Leu Gly Val Asp Phe Gly Tyr		
115	120	125
Tyr Trp Phe His Arg Met Ala His Glu Val Asn Ile Met Trp Ala Gly		
130	135	140
His Gln Thr His His Ser Ser Glu Asp Tyr Asn Leu Ser Thr Ala Leu		
145	150	155
Arg Gln Ser Val Leu Gln Ile Tyr Thr Ser Trp Ile Phe Tyr Ser Pro		
165	170	175
Leu Ala Leu Phe Ile Pro Pro Ser Val Tyr Ala Val His Leu Gln Phe		
180	185	190
Asn Leu Leu Tyr Gln Phe Trp Ile His Thr Glu Val Ile Asn Asn Leu		
195	200	205
Gly Pro Leu Glu Leu Ile Leu Asn Thr Pro Ser His His Arg Val His		
210	215	220
His Gly Arg Asn Arg Tyr Cys Ile Asp Lys Asn Tyr Ala Gly Val Leu		
225	230	235
Ile Ile Trp Asp Lys Ile Phe Gly Thr Phe Glu Ala Glu Asn Glu Lys		
245	250	255
Val Val Tyr Gly Leu Thr His Pro Ile Asn Thr Phe Glu Pro Ile Lys		
260	265	270
Val Gln Phe His His Leu Phe Ser Ile Trp Thr Thr Phe Trp Ala Thr		
275	280	285
Pro Gly Phe Phe Asn Lys Phe Ser Val Ile Phe Lys Gly Pro Gly Trp		
290	295	300
Gly Pro Gly Lys Pro Arg Leu Gly Leu Ser Glu Glu Ile Pro Glu Val		
305	310	315
Thr Gly Lys Glu Val Pro Phe Ser Ser Ser Ser Ser Gln Leu Leu Lys		
325	330	335
Ile Tyr Thr Val Val Gln Phe Ala Leu Met Leu Ala Phe Tyr Glu Glu		
340	345	350
Thr Phe Ala Asp Thr Ala Ala Leu Ser Gln Val Thr Leu Leu Leu Arg		
355	360	365
Val Cys Phe Ile Ile Leu Thr Leu Thr Ser Ile Gly Phe Leu Leu Asp		
370	375	380
Gln Arg Pro Lys Ala Ala Ile Met Glu Thr Leu Arg Cys Leu Met Phe		

385 390 395 400
 Leu Met Leu Tyr Arg Phe Gly His Leu Lys Pro Leu Val Pro Ser Leu
 405 410 415
 Ser Ser Ala Phe Glu Ile Val Phe Ser Ile Cys Ile Ala Phe Trp Gly
 420 425 430
 Val Arg Ser Met Lys Gln Leu Thr Ser His Pro Trp Lys
 435 440 445

<210> 4794

<211> 735

<212> PRT

<213> Homo sapiens

<400> 4794

Met Thr Cys Leu Ile Cys Ile Ala Ser Val Lys Arg Asn Gln Ala Val
 1 5 10 15
 Trp Ser Cys Ser Gly Cys Phe Cys Ile Phe His Met Pro Cys Ile Gln
 20 25 30
 Lys Trp Ala Lys Asp Ser Gln Phe Leu Val Ser Ser Val Thr Asp Asp
 35 40 45
 Asp Phe Gly Lys Lys Asp Cys Pro Trp Pro Cys Pro Lys Cys Arg Phe
 50 55 60
 Glu Tyr Lys Arg Ser Glu Thr Pro Ser Arg Tyr Tyr Cys Tyr Cys Gly
 65 70 75 80
 Lys Val Glu Asp Pro Pro Leu Asp Pro Trp Leu Val Pro His Ser Cys
 85 90 95
 Gly Gln Val Cys Glu Arg Glu Phe Lys Pro Pro Cys Gly His Lys Cys
 100 105 110
 Leu Leu Leu Cys His Pro Gly Pro Cys Pro Pro Cys Pro Lys Met Val
 115 120 125
 Thr Thr Thr Cys Tyr Cys Lys Lys Ala Lys Pro Ile Pro Arg Arg Cys
 130 135 140
 Ser Ala Lys Glu Trp Ser Cys Gln Leu Pro Cys Gly Gln Lys Leu Leu
 145 150 155 160
 Cys Gly Gln His Lys Cys Glu Asn Pro Cys His Ala Gly Ser Cys Gln

165	170	175
Pro Cys Pro Arg Val Ser Arg Gln Lys Cys Val Cys Gly Lys Lys Val		
180	185	190
Ala Glu Arg Ser Cys Ala Ser Pro Leu Trp His Cys Asp Gln Val Cys		
195	200	205
Gly Lys Thr Leu Pro Cys Gly Asn His Thr Cys Glu Gln Val Cys His		
210	215	220
Val Gly Ala Cys Gly Glu Cys Pro Arg Ser Gly Lys Arg Phe Cys Pro		
225	230	235
Cys Gln Lys Ser Lys Phe Ser Leu Pro Cys Thr Glu Asp Val Pro Thr		
245	250	255
Cys Gly Asp Ser Cys Asp Lys Val Leu Glu Cys Gly Ile His Arg Cys		
260	265	270
Ser Gln Arg Cys His Arg Gly Pro Cys Glu Thr Cys Arg Gln Glu Val		
275	280	285
Glu Lys His Cys Arg Cys Gly Lys His Thr Lys Arg Met Pro Cys His		
290	295	300
Lys Pro Tyr Leu Cys Glu Thr Lys Cys Val Lys Met Arg Asp Cys Gln		
305	310	315
Lys His Gln Cys Arg Arg Lys Cys Cys Pro Gly Asn Cys Pro Pro Cys		
325	330	335
Asp Gln Asn Cys Gly Arg Thr Leu Gly Cys Arg Asn His Lys Cys Pro		
340	345	350
Ser Val Cys His Arg Gly Ser Cys Tyr Pro Cys Pro Glu Thr Val Asp		
355	360	365
Val Lys Cys Asn Cys Gly Asn Thr Lys Val Thr Val Pro Cys Gly Arg		
370	375	380
Glu Arg Thr Thr Arg Pro Pro Lys Cys Lys Glu Gln Cys Ser Arg Pro		
385	390	395
Pro Thr Cys His His Thr Ser Gln Glu Lys His Arg Cys His Phe Gly		
405	410	415
Ser Cys Pro Pro Cys His Gln Pro Cys Gln Lys Val Leu Glu Lys Cys		
420	425	430
Gly His Leu Cys Pro Ala Pro Cys His Asp Gln Ala Leu Ile Lys Gln		
435	440	445

Thr Gly Arg His Gln Pro Thr Gly Pro Trp Glu Gln Pro Ser Glu Pro			
450	455	460	
Ala Phe Ile Gln Thr Ala Leu Pro Cys Pro Pro Cys Gln Val Pro Ile			
465	470	475	480
Pro Met Glu Cys Leu Gly Lys His Glu Val Ser Pro Leu Pro Cys His			
	485	490	495
Ala Val Gly Pro Tyr Ser Cys Lys Arg Val Cys Gly Arg Ile Leu Asp			
	500	505	510
Cys Gln Asn His Thr Cys Met Lys Glu Cys His Lys Val Thr Lys Thr			
	515	520	525
Asp Gly Cys Thr Gly Lys Asn Lys Ala Gly Pro Glu Cys Leu His Cys			
	530	535	540
Glu Glu Gly Cys Ser Lys Ser Arg Pro Leu Gly Cys Leu His Pro Cys			
545	550	555	560
Ile Leu Arg Cys His Pro Gly Glu Cys Pro Pro Cys Val Gln Met Leu			
	565	570	575
Arg Ile Lys Cys His Cys Lys Ile Thr Ser Leu Tyr Val Glu Cys Arg			
	580	585	590
Lys Ile Thr Thr Ala Asp Val Asn Glu Lys Asn Leu Leu Ser Cys Cys			
	595	600	605
Lys Asn Gln Cys Pro Lys Glu Leu Pro Cys Gly His Arg Cys Lys Glu			
	610	615	620
Met Cys His Pro Gly Glu Cys Pro Phe Asn Cys Asn Gln Lys Val Lys			
625	630	635	640
Leu Arg Cys Pro Cys Lys Arg Ile Lys Lys Glu Leu Gln Cys Asn Lys			
	645	650	655
Val Arg Glu Asn Gln Val Ser Ile Glu Cys Asp Thr Thr Cys Lys Glu			
	660	665	670
Met Lys Arg Lys Ala Ser Glu Ile Lys Glu Ala Glu Ala Lys Ala Ala			
	675	680	685
Leu Glu Glu Glu Lys Arg Arg Gln Gln Ala Glu Leu Glu Ala Phe Glu			
	690	695	700
Asn Arg Leu Lys Gly Arg Arg Lys Lys Asn Arg Lys Arg Asp Glu Val			
705	710	715	720
Ala Val Glu Leu Ser Leu Trp Gln Lys His Lys Tyr Tyr Leu Ile			
	725	730	735

<210> 4795

<211> 578

<212> PRT

<213> Homo sapiens

<400> 4795

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Met Pro Gly Pro His Leu Ser Leu Ser Ala Ile Ser Met Ser Leu Ser
  1              5              10              15
Leu His Leu Phe Leu Leu Pro Leu Ser Leu Tyr Phe Phe Ser Ser Leu
      20              25              30
Leu His Phe Gln Ser Leu Leu Leu Cys Leu Leu Val Ser Arg Phe Cys
      35              40              45
Val Ser Ile Ser Leu Thr Cys Ile Ser Met Ser Ser Phe Val Leu Phe
      50              55              60
Ser Met Ser Leu Gly Arg His His Leu Leu Pro Thr Lys Ser Pro Tyr
      65              70              75              80
Pro His Ala Tyr Thr Ser Leu Leu Ser Leu Pro Gln Phe Asn Pro Glu
      85              90              95
Leu Val Leu Val Ser Ala Gly Phe Asp Ala Ala Arg Gly Asp Pro Leu
      100             105             110
Gly Gly Cys Gln Val Ser Pro Glu Gly Tyr Ala His Leu Thr His Leu
      115             120             125
Leu Met Gly Leu Ala Ser Gly Arg Ile Ile Leu Ile Leu Glu Gly Gly
      130             135             140
Tyr Asn Leu Thr Ser Ile Ser Glu Ser Met Ala Ala Cys Thr Arg Ser
      145             150             155             160
Leu Leu Gly Asp Pro Pro Pro Leu Leu Thr Leu Pro Arg Pro Pro Leu
      165             170             175
Ser Gly Ala Leu Ala Ser Ile Thr Glu Thr Ile Gln Val His Arg Arg
      180             185             190
Tyr Trp Arg Ser Leu Arg Val Met Lys Val Glu Asp Arg Glu Gly Pro
      195             200             205
Ser Ser Ser Lys Leu Val Thr Lys Lys Ala Pro Gln Pro Ala Lys Pro
      210             215             220

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Gln Val Tyr Cys Gly Arg Tyr Ile Asn Gly His Met Leu Gln His His
 515 520 525
 Gly Asn Ser Gly His Pro Leu Val Leu Ser Tyr Ile Asp Leu Ser Ala
 530 535 540
 Trp Cys Tyr Tyr Cys Gln Ala Tyr Val His His Gln Ala Leu Leu Asp
 545 550 555 560
 Val Lys Asn Ile Ala His Gln Asn Lys Phe Gly Glu Asp Met Pro His
 565 570 575
 Pro His

<210> 4796

<211> 108

<212> PRT

<213> Homo sapiens

<400> 4796

Met Gly Thr Asp Glu Asp Cys Tyr Gln Glu Arg Gly Asp Trp Asp Gln
 1 5 10 15
 Glu Ser Gly Phe Gly Arg Glu Glu Pro Arg Leu Leu Phe Trp Met Cys
 20 25 30
 Gln Asp Arg Ser Ala Phe Glu Lys Ser Glu Leu Trp Tyr Gln Ile Ala
 35 40 45
 Ser Trp Ile Cys Glu Thr Gly Val Trp Gly Lys Glu Arg Pro Trp Leu
 50 55 60
 Lys Asn Val Ser Phe Gly Asn Val Asn Ile Lys Pro Gln Asp Trp Val
 65 70 75 80
 Thr Trp Pro Ser Arg Gly Val Gly Thr Glu Lys Arg Pro Trp Pro Glu
 85 90 95
 Pro Trp Gly His Leu His Leu Gly Glu Lys Gly Met
 100 105

<210> 4797

<211> 142

<212> PRT

<213> Homo sapiens

<400> 4797

Met Ala Pro Val Lys Ile Ser His Val Val Ser Phe Ser Ser Gln Asp
 1 5 10 15
 Pro Lys Tyr Pro Val Glu Asn Leu Leu Asn Pro Asp Ser Pro Arg Arg
 20 25 30
 Pro Trp Leu Gly Cys Pro Gln Asp Lys Ser Gly Gln Leu Lys Val Glu
 35 40 45
 Leu Gln Leu Glu Arg Ala Val Pro Thr Gly Tyr Ile Asp Val Gly Asn
 50 55 60
 Cys Gly Cys Ala Phe Leu Gln Ile Asp Val Gly His Ser Ser Trp Pro
 65 70 75 80
 Leu Asp Arg Pro Phe Ile Thr Leu Leu Pro Ala Thr Thr Leu Met Ser
 85 90 95
 Leu Thr Asp Ser Lys Gln Gly Lys Asn Arg Ser Gly Val Arg Met Phe
 100 105 110
 Lys Asp Gly Lys Glu Gly Lys Ser Arg Lys Asp Gly Gly Gly Leu Tyr
 115 120 125
 Glu Lys Gln Arg Cys Ser Thr Lys Glu Asp Cys Glu Cys Tyr
 130 135 140

<210> 4798

<211> 153

<212> PRT

<213> Homo sapiens

<400> 4798

Met Tyr Glu Ile Tyr Val Glu Thr Cys Gly Gln Asn Thr Glu Asn Gln
 1 5 10 15
 Val Asn Pro Ala Thr Phe Gly Lys Leu Val Arg Leu Val Phe Pro Asp
 20 25 30
 Leu Gly Thr Arg Trp Leu Gly Thr Arg Gly Ser Ala Arg Tyr His Tyr
 35 40 45

Asp Gly Ile Cys Ile Lys Lys Ser Ser Phe Phe Tyr Ala Gln Tyr Cys
 50 55 60
 Cys Leu Ile Gly Glu Lys Arg Tyr His Ser Gly Asp Ala Ile Ala Phe
 65 70 75 80
 Glu Lys Ser Thr Asn Tyr Asn Ser Ile Ile Gln Gln Glu Ala Thr Cys
 85 90 95
 Glu Asp His Ser Pro Met Lys Thr Asp Pro Val Gly Ser Pro Leu Ser
 100 105 110
 Glu Phe Arg Arg Cys Pro Phe Leu Glu Gln Glu Leu Ala Lys Lys Tyr
 115 120 125
 Ser Cys Asn Met Met Ala Phe Leu Ala Asp Glu Tyr Cys Asn Tyr Cys
 130 135 140
 Arg Asp Ile Leu Arg Asn Val Arg Asn
 145 150

<210> 4799

<211> 787

<212> PRT

<213> Homo sapiens

<400> 4799

Met Glu Gly Ala Gly Glu Asn Ala Pro Glu Ser Ser Ser Ser Ala Pro
 1 5 10 15
 Gly Ser Glu Glu Ser Ala Arg Asp Pro Gln Val Pro Pro Pro Glu Glu
 20 25 30
 Glu Ser Gly Asp Cys Ala Arg Ser Leu Glu Ala Val Pro Lys Lys Leu
 35 40 45
 Cys Gly Tyr Leu Ser Lys Phe Gly Gly Lys Gly Pro Ile Arg Gly Trp
 50 55 60
 Lys Ser Arg Trp Phe Phe Tyr Asp Glu Arg Lys Cys Gln Leu Tyr Tyr
 65 70 75 80
 Ser Arg Thr Ala Gln Asp Ala Asn Pro Leu Asp Ser Val Asp Leu Ser
 85 90 95
 Ser Ala Val Phe Asp Cys Lys Ala Asp Ala Glu Glu Gly Ile Phe Glu
 100 105 110

Ile Lys Thr Pro Ser Arg Val Ile Thr Leu Lys Ala Ala Thr Lys Gln
 115 120 125
 Ala Met Leu Tyr Trp Leu Gln Gln Leu Gln Met Lys Arg Trp Glu Phe
 130 135 140
 His Asn Ser Pro Pro Ala Pro Pro Ala Thr Pro Asp Ala Ala Leu Ala
 145 150 155 160
 Gly Asn Gly Pro Val Leu His Leu Glu Leu Gly Gln Glu Glu Ala Glu
 165 170 175
 Leu Glu Glu Phe Leu Cys Pro Val Lys Thr Pro Pro Gly Leu Val Gly
 180 185 190
 Val Ala Ala Ala Leu Gln Pro Phe Pro Ala Leu Gln Asn Ile Ser Leu
 195 200 205
 Lys His Leu Gly Thr Glu Ile Gln Asn Thr Met His Asn Ile Arg Gly
 210 215 220
 Asn Lys Gln Ala Gln Gly Thr Gly His Glu Pro Pro Gly Glu Asp Ser
 225 230 235 240
 Pro Gln Ser Gly Glu Pro Gln Arg Glu Glu Gln Pro Leu Ala Ser Asp
 245 250 255
 Ala Ser Thr Pro Gly Arg Glu Pro Glu Asp Ser Pro Lys Pro Ala Pro
 260 265 270
 Lys Pro Ser Leu Thr Ile Ser Phe Ala Gln Lys Ala Lys Arg Gln Asn
 275 280 285
 Asn Thr Phe Pro Phe Phe Ser Glu Gly Ile Thr Arg Asn Arg Thr Ala
 290 295 300
 Gln Glu Lys Val Ala Ala Leu Glu Gln Gln Val Leu Met Leu Thr Lys
 305 310 315 320
 Glu Leu Lys Ser Gln Lys Glu Leu Val Lys Ile Leu His Lys Ala Leu
 325 330 335
 Glu Ala Ala Gln Gln Glu Lys Arg Ala Ser Ser Ala Tyr Leu Ala Ala
 340 345 350
 Ala Glu Asp Lys Asp Arg Leu Glu Leu Val Arg His Lys Val Arg Gln
 355 360 365
 Ile Ala Glu Leu Gly Arg Arg Val Glu Ala Leu Glu Gln Glu Arg Glu
 370 375 380
 Ser Leu Ala His Thr Ala Ser Leu Arg Glu Gln Gln Val Gln Glu Leu
 385 390 395 400

Gln Gln His Val Gln Leu Leu Met Asp Lys Asn His Ala Lys Gln Gln
 405 410 415
 Val Ile Cys Lys Leu Ser Glu Lys Val Thr Gln Asp Phe Thr His Pro
 420 425 430
 Pro Asp Gln Ser Pro Leu Arg Pro Asp Ala Ala Asn Arg Asp Phe Leu
 435 440 445
 Ser Gln Gln Gly Lys Ile Glu His Leu Lys Asp Asp Met Glu Ala Tyr
 450 455 460
 Arg Thr Gln Asn Cys Phe Leu Asn Ser Glu Ile His Gln Val Thr Lys
 465 470 475 480
 Ile Trp Arg Lys Val Ala Glu Lys Glu Lys Ala Leu Leu Thr Lys Cys
 485 490 495
 Ala Tyr Leu Gln Ala Arg Asn Cys Gln Val Glu Ser Lys Tyr Leu Ala
 500 505 510
 Gly Leu Arg Arg Leu Gln Glu Ala Leu Gly Asp Glu Ala Ser Glu Cys
 515 520 525
 Ser Glu Leu Leu Arg Gln Leu Val Gln Glu Ala Leu Gln Trp Glu Ala
 530 535 540
 Gly Glu Ala Ser Ser Asp Ser Ile Glu Leu Ser Pro Ile Ser Lys Tyr
 545 550 555 560
 Asp Glu Tyr Gly Phe Leu Thr Val Pro Asp Tyr Glu Val Glu Asp Leu
 565 570 575
 Lys Leu Leu Ala Lys Ile Gln Ala Leu Glu Ser Arg Ser His His Leu
 580 585 590
 Leu Gly Leu Glu Ala Val Asp Arg Pro Leu Arg Glu Arg Trp Val Ala
 595 600 605
 Leu Gly Asp Leu Val Pro Ser Ala Glu Leu Lys Gln Leu Leu Arg Ala
 610 615 620
 Gly Val Pro Arg Glu His Arg Pro Arg Val Trp Arg Trp Leu Val His
 625 630 635 640
 Leu Arg Val Gln His Leu His Thr Pro Gly Cys Tyr Gln Glu Leu Leu
 645 650 655
 Ser Arg Gly Gln Ala Arg Glu His Pro Ala Ala Arg Gln Ile Glu Leu
 660 665 670
 Asp Leu Asn Arg Thr Phe Pro Asn Asn Lys His Phe Thr Cys Gly Ser
 675 680 685

Trp Ser Ser Leu Arg Gln Ser Thr Trp Gly Gly Gly His Pro Gly Ala
 690 695 700
 Glu Leu Cys Pro Arg Ala Val Pro Ala Arg Thr Arg Trp Arg Gly Lys
 705 710 715 720
 Pro Asp Leu Ala Thr Ser Pro Pro His Ser Leu Pro His Pro Trp Leu
 725 730 735
 Ala Asp Pro Leu Glu Val Arg His Gly Pro Val Ala Gln Pro Trp Val
 740 745 750
 Ser His His His Val Thr Leu Asp Met Ser Leu Pro Leu Ser Gly Pro
 755 760 765
 Gln Phe Pro His Trp Asp Ile Val Cys Cys Lys Ala Ile Gly Trp Ala
 770 775 780
 Thr Ser Ser
 785

<210> 4800

<211> 221

<212> PRT

<213> Homo sapiens

<400> 4800

Met Ser Gly Glu Ala Thr Val Leu Ala Tyr His Ala Pro Glu Glu Gln
 1 5 10 15
 Glu Gly Leu Leu Val Val Lys Val Glu Glu Glu Asn Tyr Val Leu Asp
 20 25 30
 Gln Asp Phe Gly Leu Gln Glu Asn Pro Trp Ser Gln Glu Val Phe Arg
 35 40 45
 Gln Lys Phe Arg Gln Phe Ser Tyr Ser Asp Ser Thr Gly Pro Arg Glu
 50 55 60
 Ala Leu Ser Arg Leu Arg Glu Leu Cys Cys Gln Trp Leu Arg Pro Glu
 65 70 75 80
 Val His Ser Lys Glu Gln Ile Leu Glu Leu Leu Met Leu Glu Gln Phe
 85 90 95
 Leu Ala Ile Leu Pro Glu Glu Leu Gln Ala Trp Leu Arg Glu His Arg
 100 105 110

Pro Glu Asn Gly Glu Glu Ala Val Thr Met Leu Glu Glu Leu Glu Lys
 115 120 125
 Glu Leu Glu Glu Pro Arg Gln Gln Asp Thr Thr His Gly Gln Glu Met
 130 135 140
 Phe Trp Gln Glu Met Thr Ser Thr Gly Ala Leu Lys Ser Leu Ser Leu
 145 150 155 160
 Asn Ser Pro Val Gln Pro Leu Glu Asn Gln Cys Lys Thr Glu Thr Gln
 165 170 175
 Glu Ser Gln Ala Phe Gln Glu Arg Asp Gly Val Ser Leu Cys His Pro
 180 185 190
 Gly Trp Ser Ala Val Val Gln Pro Gln Leu Thr Ala Val Ala Leu Asn
 195 200 205
 Pro Trp Val Lys Val Ile Leu Leu Pro Gln Pro Pro Glu
 210 215 220

<210> 4801

<211> 1043

<212> PRT

<213> Homo sapiens

<400> 4801

Met Ala Met Ala Leu Glu Leu Gln Ala Gln Ala Ser Pro Gln Pro Glu
 1 5 10 15
 Pro Glu Glu Leu Leu Ile Val Lys Leu Glu Glu Asp Ser Trp Gly Ser
 20 25 30
 Glu Ser Lys Leu Trp Glu Lys Asp Arg Gly Ser Val Ser Gly Pro Glu
 35 40 45
 Ala Ser Arg Gln Arg Phe Arg Gln Phe Gln Tyr Arg Asp Ala Ala Gly
 50 55 60
 Pro His Glu Ala Phe Ser Gln Leu Trp Ala Leu Cys Cys Arg Trp Leu
 65 70 75 80
 Arg Pro Glu Ile Arg Leu Lys Glu Gln Ile Leu Glu Leu Leu Val Leu
 85 90 95
 Glu Gln Phe Leu Thr Ile Leu Pro Arg Glu Val Gln Thr Trp Val Gln

100	105	110
Ala Arg His Pro Glu Ser Gly	Glu Glu Ala Val Ala Leu Val Glu Asp	
115	120	125
Trp His Arg Glu Thr Arg Thr	Ala Gly Gln Ser Gly Leu Glu Leu His	
130	135	140
Thr Glu Glu Thr Arg Pro Leu Lys	Thr Gly Glu Glu Ala Gln Ser Phe	
145	150	155
Gln Leu Gln Pro Val Asp Pro Trp	Pro Glu Gly Gln Ser Gln Lys Lys	
165	170	175
Gly Val Lys Asn Thr Cys Pro Asp	Leu Pro Asn His Leu Asn Ala Glu	
180	185	190
Val Ala Pro Gln Pro Leu Lys Glu	Ser Ala Val Leu Thr Pro Arg Val	
195	200	205
Pro Thr Leu Pro Lys Met Gly Ser	Val Gly Asp Trp Glu Val Thr Ala	
210	215	220
Glu Ser Gln Glu Ala Leu Gly Pro	Gly Lys His Ala Glu Lys Glu Leu	
225	230	235
Cys Lys Asp Pro Pro Gly Asp Asp	Cys Gly Asn Ser Val Cys Leu Gly	
245	250	255
Val Pro Val Ser Lys Pro Ser Asn	Thr Ser Glu Lys Glu Gln Gly Pro	
260	265	270
Glu Phe Trp Gly Leu Ser Leu Ile	Asn Ser Gly Lys Arg Ser Thr Ala	
275	280	285
Asp Tyr Ser Leu Asp Asn Glu Pro	Ala Gln Ala Leu Thr Trp Arg Asp	
290	295	300
Ser Arg Ala Trp Glu Glu Gln Tyr	Gln Trp Asp Val Glu Asp Met Lys	
305	310	315
Val Ser Gly Val His Trp Gly Tyr	Glu Glu Thr Lys Thr Phe Leu Ala	
325	330	335
Ile Leu Ser Glu Ser Pro Phe Ser	Glu Lys Leu Arg Thr Cys His Gln	
340	345	350
Asn Arg Gln Val Tyr Arg Ala Ile	Ala Glu Gln Leu Arg Ala Arg Gly	
355	360	365
Phe Leu Arg Thr Leu Glu Gln Cys	Arg Tyr Arg Val Lys Asn Leu Leu	
370	375	380
Arg Asn Tyr Arg Lys Ala Lys Ser	Ser His Pro Pro Gly Thr Cys Pro	

385	390	395	400
Phe Tyr Glu Glu Leu Glu Ala Leu Val Arg Ala Arg Thr Ala Ile Arg			
405	410	415	
Ala Thr Asp Gly Pro Gly Glu Ala Val Ala Leu Pro Arg Leu Gly Asp			
420	425	430	
Ser Asp Ala Glu Met Asp Glu Gln Glu Glu Gly Gly Trp Asp Pro Glu			
435	440	445	
Glu Met Ala Glu Asp Cys Asn Gly Ala Gly Leu Val Asn Val Glu Ser			
450	455	460	
Thr Gln Gly Pro Arg Ile Ala Gly Ala Pro Ala Leu Phe Gln Ser Arg			
465	470	475	480
Ile Ala Gly Val His Trp Gly Tyr Glu Glu Thr Lys Ala Phe Leu Ala			
485	490	495	
Ile Leu Ser Glu Ser Pro Phe Ser Glu Lys Leu Arg Thr Cys His Gln			
500	505	510	
Asn Ser Gln Val Tyr Arg Ala Ile Ala Glu Arg Leu Cys Ala Leu Gly			
515	520	525	
Phe Leu Arg Thr Leu Glu Gln Cys Arg Tyr Arg Phe Lys Asn Leu Leu			
530	535	540	
Arg Ser Tyr Arg Lys Ala Lys Ser Ser His Pro Pro Gly Thr Cys Pro			
545	550	555	560
Phe Tyr Glu Glu Leu Asp Ser Leu Met Arg Ala Arg Ala Ala Val Arg			
565	570	575	
Ala Met Gly Thr Val Arg Glu Ala Ala Gly Leu Pro Arg Cys Gly Gln			
580	585	590	
Ser Ser Ala Glu Thr Asp Ala Gln Glu Ala Trp Gly Glu Val Ala Asn			
595	600	605	
Glu Asp Ala Val Lys Pro Ser Thr Leu Cys Pro Lys Ala Pro Asp Met			
610	615	620	
Gly Phe Glu Met Arg His Glu Asp Glu Asp Gln Ile Ser Glu Gln Asp			
625	630	635	640
Ile Phe Glu Gly Leu Pro Gly Ala Leu Ser Lys Cys Pro Thr Glu Ala			
645	650	655	
Val Cys Gln Pro Leu Asp Trp Gly Glu Asp Ser Glu Asn Glu Asn Glu			
660	665	670	
Asp Glu Gly Gln Trp Gly Asn Pro Ser Gln Glu Gln Trp Gln Glu Ser			

675	680	685
Ser Ser Glu Glu Asp Leu Glu Lys Leu Ile Asp His Gln Gly Leu Tyr		
690	695	700
Leu Ala Glu Lys Pro Tyr Lys Cys Asp Thr Cys Met Lys Ser Phe Ser		
705	710	715
Arg Ser Ser His Phe Ile Ala His Gln Arg Ile His Thr Gly Glu Lys		
725	730	735
Pro Tyr Lys Arg Leu Glu Cys Gly Lys Asn Phe Ser Asp Arg Ser Asn		
740	745	750
Leu Asn Thr His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys		
755	760	765
Leu Glu Cys Gly Lys Ser Phe Ser Asp His Ser Asn Leu Ile Thr His		
770	775	780
Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Gly Glu Cys Trp		
785	790	795
Lys Ser Phe Asn Gln Ser Ser Asn Leu Leu Lys His Gln Arg Ile His		
805	810	815
Leu Gly Gly Asn Pro Asp Gln Cys Ser Glu Pro Gly Gly Asn Phe Ala		
820	825	830
Gln Ser Pro Ser Phe Ser Ala His Trp Arg Asn Ser Thr Glu Glu Thr		
835	840	845
Ala Pro Glu Gln Pro Gln Ser Ile Ser Lys Asp Leu Asn Ser Pro Gly		
850	855	860
Pro His Ser Thr Asn Ser Gly Glu Lys Leu Tyr Glu Cys Ser Glu Cys		
865	870	875
Gly Arg Ser Phe Ser Lys Ser Ser Ala Leu Ile Ser His Gln Arg Ile		
885	890	895
His Thr Gly Glu Lys Pro Tyr Glu Cys Ala Glu Cys Gly Lys Ser Phe		
900	905	910
Ser Lys Ser Ser Thr Leu Ala Asn His Gln Arg Thr His Thr Gly Glu		
915	920	925
Lys Pro Tyr Lys Cys Val Asp Cys Gly Lys Cys Phe Ser Glu Arg Ser		
930	935	940
Lys Leu Ile Thr His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys		
945	950	955
Cys Leu Glu Cys Gly Lys Phe Phe Arg Asp Arg Ser Asn Leu Ile Thr		

965 970 975
 His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Arg Glu Cys
 980 985 990
 Gly Lys Cys Phe Asn Gln Ser Ser Ser Leu Ile Ile His Gln Arg Ile
 995 1000 1005
 His Thr Gly Glu Lys Pro Tyr Lys Cys Thr Glu Cys Gly Lys Asp Phe
 1010 1015 1020
 Asn Asn Ser Ser His Phe Ser Ala His Arg Arg Thr His Ala Gly Gly
 1025 1030 1035 1040
 Lys Ala Ser

<210> 4802

<211> 422

<212> PRT

<213> Homo sapiens

<400> 4802

Met Pro Leu Trp Glu Ala Pro Ser Asp His Pro Ala Asn Pro Pro Ala
 1 5 10 15
 Thr Leu Gln Gly His Thr Ser Leu Pro Gly Cys Gln Glu Glu Pro Ala
 20 25 30
 Arg Asp Pro Gln Ser Gly Leu Pro Gln Ile Thr Ser Glu Ser Ser Ser
 35 40 45
 Phe Ser Glu Gly Ser Leu Pro Ser Trp Ser Ser Gly Pro Ala Gly Ala
 50 55 60
 Lys Leu Asn Ala Ser His Glu Gly Ile Gly Ser Ser Ser Asp Gly Asn
 65 70 75 80
 Gly Asp Ser Lys Ala Ala Thr Glu Arg Val Val Ser Ala Met Asp Thr
 85 90 95
 Val Arg Arg Lys His Pro Glu Ile Thr Phe Tyr Ile Leu Val Lys Ala
 100 105 110
 Ile Tyr Thr Leu Gly Tyr Ser Val Ser Leu Met Ser Leu Ala Thr Gly
 115 120 125

Ser Ile Ile Leu Cys Leu Phe Arg Lys Leu His Cys Thr Arg Asn Tyr
 130 135 140
 Ile His Leu Asn Leu Phe Leu Ser Phe Ile Leu Arg Ala Ile Ser Val
 145 150 155 160
 Leu Val Lys Asp Asp Val Leu Tyr Ser Ser Ser Gly Thr Leu His Cys
 165 170 175
 Pro Asp Gln Pro Ser Ser Trp Val Gly Cys Lys Leu Ser Leu Val Phe
 180 185 190
 Leu Gln Tyr Cys Ile Met Ala Asn Phe Phe Trp Leu Leu Val Glu Gly
 195 200 205
 Leu Tyr Leu His Thr Leu Leu Val Ala Met Leu Pro Pro Arg Arg Cys
 210 215 220
 Phe Leu Ala Tyr Leu Leu Ile Gly Trp Gly Leu Pro Thr Val Cys Ile
 225 230 235 240
 Gly Ala Trp Thr Ala Ala Arg Leu Tyr Leu Glu Asp Thr Gly Cys Trp
 245 250 255
 Asp Thr Asn Asp His Ser Val Pro Trp Trp Val Ile Arg Ile Pro Ile
 260 265 270
 Leu Ile Ser Ile Ile Val Asn Phe Val Leu Phe Ile Ser Ile Ile Arg
 275 280 285
 Ile Leu Leu Gln Lys Leu Thr Ser Pro Asp Val Gly Gly Asn Asp Gln
 290 295 300
 Ser Gln Tyr Lys Arg Leu Ala Lys Ser Thr Leu Leu Leu Ile Pro Leu
 305 310 315 320
 Phe Gly Val His Tyr Met Val Phe Ala Val Phe Pro Ile Ser Ile Ser
 325 330 335
 Ser Lys Tyr Gln Ile Leu Phe Glu Leu Cys Leu Gly Ser Phe Gln Gly
 340 345 350
 Leu Val Val Ala Val Leu Tyr Cys Phe Leu Asn Ser Glu Val Gln Cys
 355 360 365
 Glu Leu Lys Arg Lys Trp Arg Ser Arg Cys Pro Thr Pro Ser Ala Ser
 370 375 380
 Arg Asp Tyr Arg Val Cys Gly Ser Ser Phe Ser Arg Asn Gly Ser Glu
 385 390 395 400
 Gly Ala Leu Gln Phe His Arg Gly Ser Arg Ala Gln Ser Phe Leu Gln

405 410 415
 Thr Glu Thr Ser Val Ile
 420

<210> 4803

<211> 310

<212> PRT

<213> Homo sapiens

<400> 4803

Met Pro Ser Ser Lys Pro Gly Ser Pro Ala Pro Gln Asp Pro Ser Pro
 1 5 10 15
 Ser Cys Arg Thr Cys Ser Asn Gln Val Gln Pro Gly His Leu Leu Leu
 20 25 30
 Pro Leu Thr Lys Ala Ser Leu Thr Gly Pro Ser Pro Pro Pro Ala Lys
 35 40 45
 Leu Gly Arg Ala Gln Gly Ala Pro Ser Pro Lys Gly Pro Leu Glu Ile
 50 55 60
 Gly Trp Ser Pro Asp Ala Gln Pro Leu Arg Leu Gly Glu Thr Phe Leu
 65 70 75 80
 Pro Lys Gly Val Ala Gln Leu Ser Arg Ala Ser Ser Ser Gly His Lys
 85 90 95
 Val Gly Phe Leu Gln Pro Trp Pro Pro His Pro Leu Leu Pro Gln Glu
 100 105 110
 Arg Val Pro Arg His Gln Arg Gln Cys Cys Pro Arg Ala Gly Pro Ala
 115 120 125
 Phe Gly Cys Leu Arg Gly Arg Pro Gly Gly Trp Pro Ala Thr Gly Ser
 130 135 140
 Gly Gly Arg Gln Gln Gly Arg Lys Met Gly His Pro Pro Val Ser Pro
 145 150 155 160
 Ser Ala Pro Ala Pro Ala Gly Thr Thr Ala Ile Pro Gly Leu Ile Pro
 165 170 175
 Asp Leu Val Ala Gly Thr Pro Trp Pro Arg Trp Ala Leu Ile Ala Gly
 180 185 190
 Ala Leu Ala Ala Gly Val Leu Leu Val Ser Cys Leu Leu Cys Ala Ala

195	200	205
Cys Cys Cys Cys Arg Arg His Arg Lys Lys Pro Arg Asp Lys Glu Ser		
210	215	220
Val Gly Leu Gly Ser Ala Arg Gly Thr Thr Thr Thr His Leu Val Gln		
225	230	235
Pro Asp Val Asp Gly Leu Glu Ser Ser Pro Gly Asp Ala Gln Gln Trp		240
	245	250
Gly Arg Leu Gln Leu Ser Leu Glu Phe Asp Phe Gly Ser Gln Glu Val		255
	260	265
Lys Gly Pro Ala Ala Gln Asp Gln Arg Phe Cys Glu Phe Pro Glu Arg		270
	275	280
Val Thr Gly Glu Gly Gln Thr Pro Cys Pro Gly Trp Trp Gly Ala Asp		285
	290	300
Arg Ala Gly Ala Leu Gly		
305	310	

<210> 4804

<211> 872

<212> PRT

<213> Homo sapiens

<400> 4804

Met Gln Glu Ala Ile Ile Leu Leu Ala Leu Leu Gly Ala Met Ser Gly		
1	5	10
Asn Val Ala Glu Asn Ser Pro Pro Gly Thr Ser Val His Lys Phe Ser		
	20	25
Val Lys Leu Ser Ala Ser Leu Ser Pro Val Ile Pro Gly Phe Pro Gln		30
	35	40
Ile Val Asn Ser Asn Pro Leu Thr Glu Ala Phe Arg Val Asn Trp Leu		45
	50	55
Ser Gly Thr Tyr Phe Glu Val Val Thr Thr Gly Met Glu Gln Leu Asp		60
	65	70
Phe Glu Thr Gly Pro Asn Ile Phe Asp Leu Gln Ile Tyr Val Lys Asp		75
	80	85
Glu Val Gly Val Thr Asp Leu Gln Val Leu Thr Val Gln Val Thr Asp		90
		95

100	105	110
Val Asn Glu Pro Pro Gln Phe Gln Gly Asn Leu Ala Glu Gly Leu His		
115	120	125
Leu Tyr Ile Val Glu Arg Ala Asn Pro Gly Phe Ile Tyr Gln Val Glu		
130	135	140
Ala Phe Asp Pro Glu Asp Thr Ser Arg Asn Ile Pro Leu Ser Tyr Phe		
145	150	155
Leu Ile Ser Pro Pro Lys Ser Phe Arg Met Ser Ala Asn Gly Thr Leu		
165	170	175
Phe Ser Thr Thr Glu Leu Asp Phe Glu Ala Arg His Arg Ser Phe His		
180	185	190
Leu Ile Val Glu Val Arg Asp Ser Gly Gly Leu Lys Ala Ser Thr Glu		
195	200	205
Leu Gln Val Asn Ile Val Asn Leu Asn Asp Glu Val Pro Arg Phe Thr		
210	215	220
Ser Pro Thr Arg Val Tyr Thr Val Leu Glu Glu Leu Ser Pro Gly Thr		
225	230	235
Ile Val Ala Asn Ile Thr Ala Glu Asp Pro Asp Asp Glu Gly Phe Pro		
245	250	255
Ser His Leu Leu Tyr Ser Ile Thr Thr Val Ser Lys Tyr Phe Met Ile		
260	265	270
Asn Gln Leu Thr Gly Thr Ile Gln Val Ala Gln Arg Ile Asp Arg Asp		
275	280	285
Ala Gly Glu Leu Arg Gln Asn Pro Thr Ile Ser Leu Glu Val Leu Val		
290	295	300
Lys Asp Arg Pro Tyr Gly Gly Gln Glu Asn Arg Ile Gln Ile Thr Phe		
305	310	315
Ile Val Glu Asp Val Asn Asp Asn Pro Ala Thr Cys Gln Lys Phe Thr		
325	330	335
Phe Ser Ile Met Val Pro Glu Arg Thr Ala Lys Gly Thr Leu Leu Leu		
340	345	350
Asp Leu Asn Lys Phe Cys Phe Asp Asp Asp Ser Glu Ala Pro Asn Asn		
355	360	365
Arg Phe Asn Phe Thr Met Pro Ser Gly Val Gly Ser Gly Ser Arg Phe		
370	375	380
Leu Gln Asp Pro Ala Gly Ser Gly Lys Ile Val Leu Ile Gly Asp Leu		

385	390	395	400
Asp Tyr Glu Asn Pro Ser Asn Leu Ala Ala Gly Asn Lys Tyr Thr Val			
405	410	415	
Ile Ile Gln Val Gln Asp Val Ala Pro Pro Tyr Tyr Lys Asn Asn Val			
420	425	430	
Tyr Val Tyr Ile Leu Thr Ser Pro Glu Asn Glu Phe Pro Leu Ile Phe			
435	440	445	
Asp Arg Pro Ser Tyr Val Phe Asp Val Ser Glu Arg Arg Pro Ala Arg			
450	455	460	
Thr Arg Val Gly Gln Val Arg Ala Thr Asp Lys Asp Leu Pro Gln Ser			
465	470	475	480
Ser Leu Leu Tyr Ser Ile Ser Thr Gly Gly Ala Ser Leu Gln Tyr Pro			
485	490	495	
Asn Val Phe Trp Ile Asn Pro Lys Thr Gly Glu Leu Gln Leu Val Thr			
500	505	510	
Lys Val Asp Cys Glu Thr Thr Pro Ile Tyr Ile Leu Arg Ile Gln Ala			
515	520	525	
Thr Asn Asn Glu Asp Thr Ser Ser Val Thr Val Thr Val Asn Ile Leu			
530	535	540	
Glu Glu Asn Asp Glu Lys Pro Ile Cys Thr Pro Asn Ser Tyr Phe Leu			
545	550	555	560
Ala Leu Pro Val Asp Leu Lys Val Gly Thr Asn Ile Gln Asn Phe Lys			
565	570	575	
Leu Thr Cys Thr Asp Leu Asp Ser Ser Pro Arg Ser Phe Arg Tyr Ser			
580	585	590	
Ile Gly Pro Gly Asn Val Asn Asn His Phe Thr Phe Ser Pro Asn Ala			
595	600	605	
Gly Ser Asn Val Thr Arg Pro Leu Leu Thr Ser Arg Phe Asp Tyr Ala			
610	615	620	
Gly Gly Phe Asp Lys Ile Trp Asp Tyr Lys Leu Leu Val Tyr Val Thr			
625	630	635	640
Asp Asp Asn Leu Met Ser Asp Lys Lys Lys Ala Glu Ala Leu Val Glu			
645	650	655	
Thr Gly Thr Val Thr Leu Ser Ile Lys Val Ile Pro His Pro Thr Thr			
660	665	670	
Ile Ile Thr Thr Thr Pro Arg Pro Arg Val Thr Tyr Gln Val Leu Arg			

675	680	685
Lys Asn Val Tyr Ser Pro Ser	Ala Trp Tyr Val Pro Phe Val Ile Thr	
690	695	700
Leu Gly Ser Ile Leu Leu Leu Gly	Leu Leu Val Tyr Leu Val Val Leu	
705	710	715
Leu Ala Lys Ala Ile His Arg His	Cys Pro Cys Lys Thr Gly Lys Asn	
725	730	735
Lys Glu Pro Leu Thr Lys Lys Gly	Glu Thr Lys Thr Ala Glu Arg Asp	
740	745	750
Val Val Val Glu Thr Ile Gln Met	Asn Thr Ile Phe Asp Gly Glu Ala	
755	760	765
Ile Asp Pro Val Thr Gly Glu Thr	Tyr Glu Leu Asn Ser Lys Thr Gly	
770	775	780
Ala Arg Lys Trp Lys Asp Pro Leu	Thr Gln Met Pro Lys Trp Lys Glu	
785	790	795
Ser Ser His Gln Gly Ala Ala Pro	Arg Arg Val Thr Ala Gly Glu Gly	
805	810	815
Met Gly Ser Leu Arg Ser Ala Asn	Trp Glu Glu Asp Glu Leu Ser Gly	
820	825	830
Lys Ala Trp Ala Glu Asp Ala Asp	Leu Gly Ser Arg Asn Glu Gly Gly	
835	840	845
Lys Leu Gly Asn Pro Lys Asn Arg	Asn Pro Ala Phe Met Asn Arg Ala	
850	855	860
Tyr Pro Lys Pro His Pro Gly Lys		
865	870	

<210> 4805

<211> 530

<212> PRT

<213> Homo sapiens

<400> 4805

Met Glu Gly Pro Leu Thr Pro Pro Pro	Leu Gln Gly Gly Gly Ala Ala
1	5
	10
	15
Ala Val Pro Glu Pro Gly Ala Arg Gln	His Pro Gly His Glu Thr Ala

20	25	30
Ala Gln Arg Tyr Ser Ala Arg Leu Leu Gln Ala Gly Tyr Glu Pro Glu		
35	40	45
Ser Asp Phe Leu Ile Leu Pro Gly Phe Ile Asp Phe Ile Ala Asp Glu		
50	55	60
Val Asp Leu Thr Ser Ala Leu Thr Arg Lys Ile Thr Leu Lys Thr Pro		
65	70	75
Leu Ile Ser Ser Pro Met Asp Thr Val Thr Glu Ala Asp Met Ala Phe		
85	90	95
Ala Met Ala Leu Met Gly Gly Ile Gly Phe Ile His His Asn Cys Thr		
100	105	110
Pro Glu Phe Gln Ala Asn Glu Val Arg Lys Val Lys Lys Phe Glu Gln		
115	120	125
Gly Phe Ile Thr Asp Pro Val Val Leu Ser Pro Ser His Thr Val Gly		
130	135	140
Asp Val Leu Glu Ala Lys Met Arg His Gly Phe Ser Gly Ile Pro Ile		
145	150	155
Thr Glu Thr Gly Thr Met Gly Ser Lys Leu Val Gly Ile Val Thr Ser		
165	170	175
Arg Asp Ile Asp Phe Leu Ala Glu Lys Asp His Thr Thr Leu Leu Ser		
180	185	190
Glu Val Met Thr Pro Arg Ile Glu Leu Val Val Ala Pro Ala Gly Val		
195	200	205
Thr Leu Lys Glu Ala Asn Glu Ile Leu Gln Arg Ser Lys Lys Gly Lys		
210	215	220
Leu Pro Ile Val Asn Asp Cys Asp Glu Leu Val Ala Ile Ile Ala Arg		
225	230	235
Thr Asp Leu Lys Lys Asn Arg Asp Tyr Pro Leu Ala Ser Lys Asp Ser		
245	250	255
Gln Lys Gln Leu Leu Cys Gly Ala Ala Val Gly Thr Arg Glu Asp Asp		
260	265	270
Lys Tyr Arg Leu Asp Leu Leu Thr Gln Ala Gly Val Asp Val Ile Val		
275	280	285
Leu Asp Ser Ser Gln Gly Asn Ser Val Tyr Gln Ile Ala Met Val His		
290	295	300
Tyr Ile Lys Gln Lys Tyr Pro His Leu Gln Val Ile Gly Gly Asn Val		

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305          310          315          320
Val Thr Ala Ala Gln Ala Lys Asn Leu Ile Asp Ala Gly Val Asp Gly
          325          330          335
Leu Arg Val Gly Met Gly Cys Gly Ser Ile Cys Ile Thr Gln Glu Val
          340          345          350
Met Ala Cys Gly Arg Pro Gln Gly Thr Ala Val Tyr Lys Val Ala Glu
          355          360          365
Tyr Ala Arg Arg Phe Gly Val Pro Ile Ile Ala Asp Gly Gly Ile Gln
          370          375          380
Thr Val Gly His Val Val Lys Ala Leu Ala Leu Gly Ala Ser Thr Val
385          390          395          400
Met Met Gly Ser Leu Leu Ala Ala Thr Thr Glu Ala Pro Gly Glu Tyr
          405          410          415
Phe Phe Ser Asp Gly Val Arg Leu Lys Lys Tyr Arg Gly Met Gly Ser
          420          425          430
Leu Asp Ala Met Glu Lys Ser Ser Ser Ser Gln Lys Arg Tyr Phe Ser
          435          440          445
Glu Gly Asp Lys Val Lys Ile Ala Gln Gly Val Ser Gly Ser Ile Gln
          450          455          460
Asp Lys Gly Ser Ile Gln Lys Phe Val Pro Tyr Leu Ile Ala Gly Ile
465          470          475          480
Gln His Gly Cys Gln Asp Ile Gly Ala Arg Ser Leu Ser Val Leu Arg
          485          490          495
Ser Met Met Tyr Ser Gly Glu Leu Lys Phe Glu Lys Arg Thr Met Ser
          500          505          510
Ala Gln Ile Glu Gly Gly Val His Gly Leu His Ser Tyr Glu Lys Arg
          515          520          525
Leu Tyr
          530

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<210> 4806

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4806

Met Leu Arg Asp Phe Val Thr Thr Arg Pro Ala Leu Gln Glu Ala Leu
 1 5 10 15
 Lys Glu Ala Leu Asn Met Glu Arg Lys Asn Arg Tyr Gln Pro Leu Gln
 20 25 30
 Lys Pro Tyr Gln Asn Met Lys Thr Asn Glu Ala Ile Lys Lys Leu His
 35 40 45
 Gln Leu Met Cys Lys Ile Thr Arg Ser Asn Ser His Ile Thr Ile Leu
 50 55 60
 Thr Leu Ser Val Asn Trp Leu Asn Ala Pro Ile Lys Lys His Arg Leu
 65 70 75 80
 Ala Asn Trp Ile Lys Ser Gln Asp Pro Ser Val Cys Cys Ile Gln Glu
 85 90 95
 Thr His Leu Met Cys Lys Asp Thr His Arg Pro Lys Ile Lys Gly Trp
 100 105 110
 Arg Asn Ile Tyr Gln Ala Asn Gly Lys Pro Lys Lys Lys Lys Ser Gly
 115 120 125
 Gly Cys Asn Pro Ser Leu
 130

<210> 4807

<211> 505

<212> PRT

<213> Homo sapiens

<400> 4807

Met Ala Gly Ala Gln Thr Leu Leu Thr Phe Arg Asp Val Ala Ile Glu
 1 5 10 15
 Phe Ser Leu Glu Glu Trp Lys Cys Leu Asp Leu Ala Gln Gln Asn Leu
 20 25 30
 Tyr Arg Asp Val Met Leu Glu Asn Tyr Arg Asn Leu Phe Ser Val Gly
 35 40 45
 Leu Thr Val Cys Lys Pro Gly Leu Ile Thr Cys Leu Glu Gln Arg Lys
 50 55 60
 Glu Pro Trp Asn Val Lys Arg Gln Glu Ala Ala Asp Gly His Pro Ala

65	70	75	80
Met Ser Ser His Phe Thr Gln Asp Leu Leu Pro Glu Gln Gly Ile Gln			
85	90	95	
Asp Ala Phe Pro Lys Arg Ile Leu Arg Gly Tyr Gly Asn Cys Gly Leu			
100	105	110	
Asp Asn Leu Tyr Leu Arg Lys Asp Trp Glu Ser Leu Asp Glu Cys Lys			
115	120	125	
Leu Gln Lys Asp Tyr Asn Gly Leu Asn Gln Cys Ser Ser Thr Thr His			
130	135	140	
Ser Lys Ile Phe Gln Tyr Asn Lys Tyr Val Lys Ile Phe Asp Asn Phe			
145	150	155	160
Ser Asn Leu His Arg Arg Asn Ile Ser Asn Thr Gly Glu Lys Pro Phe			
165	170	175	
Lys Cys Gln Glu Cys Gly Lys Ser Phe Gln Met Leu Ser Phe Leu Thr			
180	185	190	
Glu His Gln Lys Ile His Thr Gly Lys Lys Phe Gln Lys Cys Gly Glu			
195	200	205	
Cys Gly Lys Thr Phe Ile Gln Cys Ser His Phe Thr Glu Pro Glu Asn			
210	215	220	
Ile Asp Thr Gly Glu Lys Pro Tyr Lys Cys Gln Glu Cys Asn Asn Val			
225	230	235	240
Ile Lys Thr Cys Ser Val Leu Thr Lys Asn Arg Ile Tyr Ala Gly Gly			
245	250	255	
Glu His Tyr Arg Cys Glu Glu Phe Gly Lys Val Phe Asn Gln Cys Ser			
260	265	270	
His Leu Thr Glu His Glu His Gly Thr Glu Glu Lys Pro Phe Lys Cys			
275	280	285	
Glu Glu Cys Asp Ser Ile Phe Lys Trp Phe Ser Asp Leu Thr Lys His			
290	295	300	
Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asp Glu Cys Gly			
305	310	315	320
Lys Ala Tyr Thr Gln Ser Ser His Leu Ser Glu His Arg Arg Ile His			
325	330	335	
Thr Gly Glu Lys Pro Tyr Gln Cys Glu Glu Cys Gly Lys Val Phe Arg			
340	345	350	

Thr Cys Ser Ser Leu Ser Asn His Lys Arg Thr His Ser Glu Glu Lys
 355 360 365
 Pro Tyr Thr Cys Glu Glu Cys Gly Asn Ile Phe Lys Gln Leu Ser Asp
 370 375 380
 Leu Thr Lys His Lys Lys Thr His Thr Gly Glu Lys Pro Tyr Lys Cys
 385 390 395 400
 Asp Glu Cys Gly Lys Asn Phe Thr Gln Ser Ser Asn Leu Ile Val His
 405 410 415
 Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly
 420 425 430
 Arg Val Phe Met Trp Phe Ser Asp Ile Thr Lys His Lys Lys Thr His
 435 440 445
 Thr Gly Glu Lys Pro Tyr Lys Cys Asp Glu Cys Gly Lys Asn Phe Thr
 450 455 460
 Gln Ser Ser Asn Leu Ile Val His Lys Arg Ile His Thr Gly Glu Lys
 465 470 475 480
 Pro Tyr Lys Cys Glu Lys Cys Gly Lys Ala Phe Thr Gln Phe Ser His
 485 490 495
 Leu Thr Val His Glu Ser Ile His Thr
 500 505

<210> 4808

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4808

Met Val Ala Pro Arg Lys Ile Arg Trp Cys Val Glu Glu Leu Pro Ser
 1 5 10 15
 His Cys Ser Leu His Ala Phe Leu Ser Ala Arg Cys Glu Gln Gly Arg
 20 25 30
 Pro Gly Thr Ala Asp Gly Leu His Leu Ser Asp Trp Thr Ala Thr Cys
 35 40 45
 His Thr Phe Ile Glu Leu Ser Ile Ser Thr Ala Ala Val Leu Gly Val
 50 55 60

Leu Leu Gly Ser Arg Asn Lys Lys Phe Arg Glu Ala Lys Val Leu Gln
 65 70 75 80
 Gly Cys Arg Gln Val Ile Glu Pro Ser Phe Ile Glu His Leu Leu Ser
 85 90 95
 Ala Lys Tyr Ser Tyr Leu Arg Tyr Leu Val
 100 105

<210> 4809

<211> 410

<212> PRT

<213> Homo sapiens

<400> 4809

Met Phe Val Trp Asn Gln Gly Ser Lys Tyr Ser Gly Ser Glu Val Leu
 1 5 10 15
 Trp Cys Pro Leu His Trp Asn Ser Glu Glu Leu Ile Val Phe Trp Ser
 20 25 30
 Cys Val Leu Gln Val Leu Asp Trp His Arg Leu Ile Pro Leu Thr Trp
 35 40 45
 Ala Cys Met Ala Arg Gln Thr Pro His Leu Gly Glu Gln Arg Arg Thr
 50 55 60
 Thr Ala Ser Leu Leu Arg Lys Leu Thr Thr Ala Ser Asn Gly Gly Val
 65 70 75 80
 Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val Gln Glu Pro
 85 90 95
 Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys Gln Gly Thr
 100 105 110
 Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met Ser Ser Leu
 115 120 125
 Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu Leu Ser Val
 130 135 140
 Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile Ser Glu Phe
 145 150 155 160
 Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val Leu Lys Lys
 165 170 175

Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg Lys Arg Ser
 180 185 190
 Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu Lys Arg Val
 195 200 205
 Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln Asp Ile Asn
 210 215 220
 Asp Thr Val Arg Leu Leu Lys Glu Lys Cys Leu Phe Thr Val Gln Gln
 225 230 235 240
 Val Thr Lys Ile Leu His Ser Cys Pro Ser Val Leu Arg Glu Asp Leu
 245 250 255
 Gly Gln Leu Glu Tyr Lys Phe Gln Tyr Ala Tyr Phe Arg Met Gly Ile
 260 265 270
 Lys His Pro Asp Ile Val Lys Ser Glu Tyr Leu Gln Tyr Ser Leu Thr
 275 280 285
 Lys Ile Lys Gln Arg His Ile Tyr Leu Glu Arg Leu Gly Arg Tyr Gln
 290 295 300
 Thr Pro Asp Lys Lys Gly Gln Thr Gln Ile Pro Asn Pro Leu Leu Lys
 305 310 315 320
 Asp Ile Leu Arg Val Ser Glu Ala Glu Phe Leu Ala Arg Thr Ala Cys
 325 330 335
 Thr Ser Val Glu Glu Phe Gln Val Phe Lys Lys Leu Leu Ala Arg Glu
 340 345 350
 Glu Glu Glu Ser Glu Ser Ser Thr Ser Asp Asp Lys Arg Ala Ser Leu
 355 360 365
 Asp Glu Asp Glu Asp Asp Asp Asp Glu Glu Asp Asn Asp Glu Asp Asp
 370 375 380
 Asn Asp Glu Asp Asp Asp Asp Glu Asp Asp Asp Glu Ala Glu Asp Asn
 385 390 395 400
 Asp Glu Asp Glu Asp Asp Asp Glu Glu Glu
 405 410

<210> 4810

<211> 340

<212> PRT

<213> Homo sapiens